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VOLUME X.

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ST. LOUIS, MO.
Published for the MEDICAL JOURNAL AND LIBRARY ASSOCIATION
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VOL. X. JULY, 1883. NO. 1.

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COMPARATIVE MORTALITY, INSURABILITY AND PROCLIVITY TO DISEASE IN THE TWO SEXES.

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THE subject of longevity with our increase of knowledge causes new interests to arise, and propounds the question whether long life depends upon the food we eat, the exercise we take, the station in life we occupy. Does it depend upon the condition of all the organs and their working in harmony one with another, each meeting the wear and tear which nature makes for the support of life? or does it depend upon a general law of population resting upon an edict that it is appointed unto man once to die, and that that day and hour is so fixed that all these influences are wrought for that special end? Is there about our ending a predestination, an absolute fore-ordination? Flourens contended that man by virtue of his natural constitution ought to live one hundred years, and that it is improvidence on the part of the individual that abridges

this period. "The earth," says Homer, "contains nothing frailer than man;" and "nothing," says Pliny, "is weaker than human life." Whatever be the elements of longevity, whether they depend upon constitution, inheritance, or obedience to sanitary law, there comes to each individual a period when he must die. Death has so many doors to let out life that we as physicians cannot hope always to exclude its presence. We often are powerless against the strong hand of mortality. Though the process of dying is interlinked with, interwoven in, and stands correlated with the process of living, yet to ward off absolute death has formed an impulse which has made the first law of nature to be self preservation.

'Tis life whereof our nerves are scant,
Oh, life, not death, for which we pant!
More life and fuller than we want.

The time has gone by when disease of any kind can be considered a mysterious providence. That few die from old age can be taken as an index of the fact that men die before their time. Of many who die we cannot say that life was finished, but we should rather say that with them life was not completed. That mortality is decreasing and longevity becoming more assured there can be no doubt. In the seventeenth century London was the most unhealthy capital of Europe; now she is one of the healthiest. At the beginning of the fourteenth century Paris lost her population at the rate of fifty in every thousand; now it is only twenty-eight in every thousand. The mortality in England during the last century has decreased two-fifths through improved medical and sanitary science—facts in proof of Franklin's maxim that public health is public wealth; and of the converse, that sickness is poverty. The fact that each death represents not less than twenty-five other cases of sickness, and that each case of sickness represents not less than twenty-five days of suspended labor, has led associations to form for mutual protection against such ills in a pecuniary point of view. The life

of man is so arranged that he cannot live for self alone; there is, therefore, a community of interest involved in his death. Based on such facts life insurance has been organized, which deals with pecuniary loss, and has, during the last century, conferred the choicest of blessings. Over one-half million of lives are now insured in two hundred different companies. The failure of some life companies proves that there is something at fault either in their financial management or their mortality reckoning. Upon the intelligence of the prosecution of the business and upon the accuracy of the computation of the probabilities of life, upon the rate of interest and the data of mortality, rests the secret of success or failure. The matter of what is called "loading" we leave to business men; but it is to our interest to look at the exclusively professional side of this question, more especially to see whether a certain class of risks which are good are not, through the bigotry of tradition, either entirely left out or certainly not sought after.

It is evident that the old standard mortality tables are at fault. The American tables have proved that the English were an undesirable standard. Now one prepared from that of the largest companies' list of assured lives shows that the American tables make a too high rate on middle ages. Insurance has sprung up in a great measure during the last twenty years, and the mortality tables are yet far from a true standard. The passage of physiology from a speculative to a positive science will cause a revolution in the data of longevity. Though human life has been divided physiologically into certain periods, though years, in fact, are only an approximate measure of age, though different effects are produced by the causes of disease according to the period of life, though nothing is more uncertain than the duration of life in the individual, yet there are few things less subject to fluctuation than the duration of human life in a multitude of individuals.

Addison in the First Vision of Mirza, in an allegory, compares human life to a bridge standing in the midst of the tide, consisting of three score and ten arches with several broken arches, making a total of about one hundred. "As I was counting the arches, the Genius told me that this bridge consisted at first of a thousand arches, but that a great flood swept away the rest and left the bridge in the ruinous condition I now beheld it. But tell me further, said he, what thou discoverest on it. I see multitudes of people passing over it, said I, and a black cloud hanging on each end of it. As I looked more attentively, I saw several of the passengers dropping through the bridge into the great tide that flowed underneath it; and upon further examination perceived that there were innumerable trap-doors that lay concealed in the bridge, which the passengers no sooner trod upon than they fell through into the tide and disappeared. These hidden pit-falls were set very thick at the entrance of the bridge, so that throngs of people no sooner broke through the cloud than many fell into them. They grew thinner toward the middle, but multiplied and lay close together towards the end of the arches that were entire." Thus we see in this bridge, as represented by the allegory, an outline of mortality rates showing the periods which are considered critical.

It is not my intention to go over the mortality tables of life insurance, but I desire to prompt an investigation as to a commonly received opinion which I feel has unjustly permeated not only the laity—not only those engaged in life insurance, but to a greater or less extent the medical profession, and that is that through all periods of life, and especially that period known as the child-bearing period, females have less chance of life than males have at corresponding ages. This view has gone so far as to produce the idea that married life has so many dangers connected with it that those who bear children take their lives in their hands.

Capital as represented gives its favor very guardedly;

it is timid and needs to be well convinced. It was not until 1807 that a rate was fixed with reference to age on insurance. Before this time no one was admitted over forty-five years of age; and up to the present time either life companies have refused female risks entirely or charged extra on all cases, or an extra for primiparæ, or they have not encouraged the taking of them. They claim that the mortality among females is greater than that among males. Prior to 1772 females were charged invariably a higher rate than males. Some state that it is not because of prejudice gained from life rates, but because they are not a desirable class to insure, owing to trouble, etc. But to state such excuses, and to give the history of such subterfuges, would be as untimely as Livy's reasoning on the probable consequences which would have ensued had Alexander the Great invaded Italy. I do not believe such to be the cause; it is the prejudice of present wrong teaching and tradition. It is a prejudice of the same character which prevailed among the provident class in the earlier history of life insurance, only now it is companies, then it was the people. When persons were brought up before ecclesiastical courts because they had dared to insure their lives, being charged with the heinous crime of tempting Providence, narrow mindedness was then as it is now, a misfortune commanding our pity; but then as now obstinate and perverse opposition to the truth in the face of evidence was a crime meriting unqualified condemnation. Let us, free from prejudice and the trammels of tradition, view this matter.

In all countries as shown by statistics, except at the Cape of Good Hope, the male progeny predominate. Among twenty-two million births recorded in England, the proportion is 104.8 males to 100 females; only twice in thirty-four years did the ratio fall below the above, and but nine times did it reach 105 males to 100 females. In Massachusetts, among 637,698 living births, the proportion was 105.9 males to 100 females. In Philadelphia, out of

229,676 living births, the proportion was 109.5 males to 100 females. To begin with, therefore, we have an excess of male to female population.

The male mortality is in excess in still-born children. For instance, in Philadelphia the proportion of still-born males to still-born females during thirteen years has been 136.5 males to 100 females. In Massachusetts, of over 14,000 still births, the proportion was 146.6 males to 100 females. In Michigan it is 145.8 males to 100 females. Indeed, in the latter state, it reached one year as high as 162.9 males to 100 females. Counting the still births, the statistics for fourteen years in Philadelphia will show the average ratio of male births to female as 110.7 to 100. Therefore, in the beginning, the male sex starts off with a surplusage of over ten per cent., and loses nearly one-half of this before appearing upon the stage of life.

Having seen that the female sex holds the advantage in the still-birth record, let us next notice the first ten years of life. In infancy we have the low calorific power of the body, the tenderness of the skin, the rapid development and great activity of the brain in gaining acquaintance with the novelties of the external world. In the first moments of our existence we are weaker and more helpless than any other animal. From birth until the twelfth year, according to Quetelet, there is a great inequality both in weight and height between the children of the two sexes, and yet they are mentally alike. They are pleased with the same rattle and tickled with the same straw. From the last census of the United States, of those dying under five years of age, there was a difference in favor of females of 15,797. Quetelet and Smith have shown that mortality in infancy is greater among boys than girls. Statistics show that in the first five years of life the ratio of mortality of the male sex is 7.216 per 1,000, of the female sex, 6.016 per 1000. A much larger number of male than of female children die from convulsions. One-half of the human race dies under puberty. During childhood

the lumbar power (i. e., ability to carry on the back) of boys is one-third more than that of girls, and towards puberty one-half more. The manual power of males is greater than that of females at all ages; at puberty it is at a ratio of three to two. The pathogenic influences of first and second dentition are the same in both sexes. The great waste of life occurs in the first decennial period, 46.644 per cent. Of this 22.63 per cent occurs in the first division of this period. Though during the first ten years there cannot be said to exist a sexual predisposition to disease, yet there is, as Quetelet in his admirable treatise on man has said, a particular cause of mortality which attacks male children by preference before and immediately after their birth.

Taking the diseases of childhood, in croup the ratio of mortality between males and females will be as 3 : 2. In whooping cough more females are attacked, yet the mortality is greater in males; though scarlet fever is more fatal in females, yet the excess of mortality of the males in measles, the most contagious disease we have, more than balances it. Boys under inflammatory action are much more liable to the effusion of plastic or albuminous matter.

The next period is that between ten and twenty years of age. This includes puberty; this is the period in which the organs are brought to perfection. We now have as a pathological tendency those diseases which are attended by exalted action; and there is a proneness even in the glandular system to congestion and inflammation. The nervous system becomes the dominant one in the female organization. The occurrence of puberty has been well called one of the prominent mile-stones that lead from the cradle to the grave, and imparts a family likeness to the diseases of one of the epochs termed critical.

The proportion between the sexes at the time of puberty is rendered more equal than a consideration of the birth rate alone would lead us to expect, owing to the fact that the deaths of the boys in each year average 103 to 100

deaths of girls. The number of deaths from all causes and in both sexes is small between the ages of ten and twenty; and yet after a careful searching and comparing of statistics, I am convinced that it is the only decennial division of existence in which the death rate of females exceeds that of males. Now what is the cause of this? It is not from nature, but from artificial life. Precocious marriages are those of the greatest fecundity, and of least fertility, hence the mothers become broken down. Between fifteen and twenty the life of a married woman is much more precarious than that of an unmarried one; between these ages ten married will die to every seven unmarried. It is the birth of the first children from young mothers that causes the high mortality. The mortality of first labors is twice that of all subsequent labors taken together. The mortality from puerperal convulsions and puerperal fever in the young primipara is twice that from these diseases following all subsequent labors. The girl of the period is made a woman before her time; early marriages have become the fashion, so that the chances of a woman being married before the age of twenty years are as one to five of all the probabilities that she will ever marry. The young are not prepared physically for parturition. The appearance of menstruation is no proof that the person is immediately prepared for all that the function of gestation implies. Puberty is not nubility, but the complement of it. In the male sex the ability to bring about the sexual orgasm precedes the power to secrete vigorous and truly fertile sperm cells. Many of the lesions attending parturition, the tear and laceration, are from the want of perfect and complete formation. The firmness and efficiency of even the perineal body are dependent upon age, and are not completely formed until middle life. Even in the inferior kingdom the growth of fruit trees and plants in their final varieties requires considerable age. It is only when a tree has arrived at some degree of maturity that its secretions either for flower or fruit are perfectly elaborated.

Civilization and refinement cause the young puberic girl to be more liable to mortality, and the young married woman to be more liable to the sufferings of parturition, the lesions of which open before her a Pandora's box of ills. We find the same influences in horticulture. All fine fruits are artificial products; they bear the impress of an existence removed from the natural state. Vegetation removed from its natural form, transferred into artificially created soils, becomes much more liable to disease and decay. From this fact in the vegetable kingdom arises the fruit garden with its sheltered aspect, warm borders, deeper soils, in order to continue this sort of life. From similar conditions applied to the human family we have our well furnished, lighted and heated homes, finely selected and well cooked food, comfortable clothing, breathing with each inspiration the air of refinement. As in the one case we find employment for the gardener and horticulturist, so in the other there comes much of the practice for the general practitioner and the gynecologist.

In the next place, between puberty and twenty is the fertile age; it is not only the one child, but the number they bear. Here again we learn from horticulture that too frequent bearing will shorten the life of the tree. The great natural luxuriance of the peach tree enables it to lay in new fruit buds while the branches are still loaded with fruit, so that except in strong soil it is soon enfeebled, and, if allowed to expend all its accumulated sap every year, will soon exhaust itself. Even the apple tree, that hardiest orchard tree, requires a whole year to recover from the exhaustion of a full crop. So it bears well only on each alternate year.

Another cause powerful in its character is the fact that during the age between ten and twenty in the female sex we have the great number of deaths from phthisis. Indeed much of their mortality from this disease is during this period. Statistics of mortality from phthisis pulmonalis in the United States and Europe, compiled from official

health reports and from data obtained from life insurance companies, show that the percentage of deaths from this disease to total mortality is 14.19. The absolute death rate, when reduced to percentage for female sex, rises with great rapidity between the fifteenth and twentieth year. There is during this period a want of harmonious action of all the mental faculties, a want of well developed physical organization, a want of harmony between body and mind. If the ovaries and uterus become developed at the expense of the rest of the body, the young woman is sure to suffer. The depressing effects of luxury, the late hours of the ball room, a mind over-worked, whether it be with the healthy food of history or the unhealthy food of novels, a stomach fed on pastry and confections while the nerves are crying for nourishment and the muscles for supply; thus women are dissipated when young. Educated for the few years of society, thus consumption often seizes the girl when the fantastic usages of society have placed her in tight frames, have corseted her until the muscles of the back have become wasted, have altered the free and graceful form traced by the hand of nature, have cribbed, confined and curtailed her of nature's fair proportions, deprived her of that great and, in phthisis, the sole hope of recovery, the expansion of the chest; thus she becomes compressed physically until she furnishes another instance, as the world says, of the mysterious ways of Providence. But physicians may write in vain so long as fashion dictates and finds the world its votary.

The next period of life which it is desirable to notice is from twenty to forty-five years. This includes middle and a portion of adult age, the period of child-bearing and the period of sexual activity. In the early part there is a tendency to diseases of hypertrophy of tissue in the robust. We have hemorrhage on the one hand and on the other morbid deposits, such as tubercle. In the latter portion of the period we have venous congestion and visceral obstruction. In the female sex we meet with disorders connected

with the uterus and ovaries, disorders of menstruation, pregnancy, and laceration. The highest mortality of adult life in both sexes is during this period, especially between twenty and thirty years, and statistics will show that more males die than females. Finlayson proves that at twenty the mean duration of female life is five and one half years more than the male. MM. Benoiston de Chateauning and Bellefroid have long since shown that the mortality of women after twenty is not greater than among men within the same period. M. Maret did not find from twenty to forty-five a critical age. Lachaire has given analogous results. Finlayson has shown that out of 100,000 persons of all ages there will die between the ages of thirty-five and forty 7,042 males and 5,738 females; between the ages of forty and forty-five, 6,959 males, 6,889 females. In the mortality tables of Ostend, in 100,000 persons between thirty-five and forty, 8,041 were males and 6,665 females; between forty and forty-five, 11,107 were males and 7,094 females.

What effect does marriage have upon the life of a female, and in what respect, if any, does it curtail her chances for longevity? Married women belong to that class which insurance men call selected. At the age of twenty-one years one-fifth of all the chances for married life to the female are gone; at twenty-five, a little more than two-thirds; and at thirty nearly six-sevenths of all their probabilities are lost. After passing the age of forty a female has a very slight chance of ever being married; for then over twenty-nine-thirtieths of all her chances are lost. From a comparative examination of the Registrars' tables for France, it has been shown that marriage prolongs life. Between twenty and twenty-five nine married women will die for every eight unmarried; above thirty the chances appear to be in favor of the married. Farr and Stark both show that the married are much more healthful than the unmarried.

What risks of death await the woman at each successive child-birth? In this connection it must be remembered that the deaths occurring in child-bed from non-

puerperal diseases form over one-fourth of all the fatalities. In the next place it must be remembered that first children cause the highest mortality; the mortality of mothers in childbirth has decreased from one in one hundred and sixty-four to one in two hundred and twelve; and now Tarnier has reduced it to one third of one per cent. Parturition in the healthy female ought not to affect the prospect of life generally. The unfavorable statistics refer to periods and places where sanitary laws are set at defiance and the skilled obstetrician is unknown.

As to the effects of pregnancy itself, the English reports show that pregnancy is woman's safe-guard. In 1871 but thirty-five pregnant women died; and in 1879 the Registrar's report shows that but thirty-eight pregnant women died. The chances of living from twenty to forty-five is in favor of women; the violent deaths of men more than counterbalance the danger of child-bearing. The percentage of the total deaths between the above years will for a number of years in a large city stand as follows: 14.84 per cent. males, 12.55 per cent. females.

Next let us notice the period of life in women which is that following the cessation of sexual activity, taking in also what is known as the period when nature prepares herself for such cessation, and running on through old age. In the early part of life there is no sexual life; so in the latter part, the sexual organs are physiologically dead. Man obtains his maximum weight at forty, and begins to waste perceptibly after his sixtieth year. Woman attains her maximum weight at fifty, but has no climacteric at sixty. The question may definitely be settled, says Taylor, that a woman who has passed the age of fifty is presumed in law to be beyond the age of child-bearing.

In old age those functions which are active in youth fail, and the body dies, as Buffon expresses it, by degrees; little by little life is extinguished, as by successsve shadows; and death is but the completion of this mingled series of degrees, the final shade upon the path of life.

In old age, and especially in woman, there are immunities and pathological predispositions unknown to the adult. The general system scarcely echoes the lesion; life ceases through weakness rather than through the oppression of disease. As Housemann expresses it, they do not complain even of malaise; they get up, make their beds, walk about, eat as usual, and afterwards, feeling a little tired, they totter to their beds and expire.

From forty-five years and upwards women die at a decidedly lower rate than men, and the mean result over the whole life is in favor of female life. Benoiston de Chateauning and Odere de Genéve have shown that if a large number of women between the ages of forty and fifty be compared with a similar number of men at the same period of life, the rate of mortality will be greater among the males than females.

Mortality of women is much less after the fiftieth year. The dodging period—the change of life, so much dreaded by the sex, is not a fatal period. Sancerotte has clearly proven that the mortality of women is greater before than after forty-five; and Maret has confirmed it. Tilt puts it that though the period is called critical, it is not a fatal period; and as far as regards cancerous affections, which in the aggregate form but a small per cent. of mortality (out of five hundred cases of disease at the climacteric but four will be cancer), these diseases are equally liable to occur in the male sex at this age. It is at the climacteric that females receive, as it were, a new lease of life and strength. Diseases of the reproductive system are greatly improved and other organs are likewise benefited. Davy asserts that in many cases of insanity recovery may be expected. In answer to the following question, namely, does the change of life give origin to the diseases or to any of them occurring at this period? a late writer, after the most careful examination, answers most emphatically: It does not. The diseases counted with the change of life, properly speaking, are not fatal. Nearly all who suffer, if

at all, suffer from nervous irritability. The diseases likely to occur are not so much cancer and other organic diseases of the ovary and womb, but they are the neuralgic affections of the cerebro-spinal and ganglionic systems, and in addition to this patients are much more liable to gastro-intestinal affections than to floodings. After the change of life we can continue with women more truly than with men the saying that there is no natural termination of life but old age. The casualties from unforeseen disease are smaller. They have passed whatever changes may have been incident to their sex, have passed the grand climacteric, pompously so called. The Director of the Bureau of Statistics at Vienna has made some interesting statistics concerning the comparative longevity of women and men in Europe. He finds that out of 102,831 individuals who have passed the age of ninety years, 60,303 are women and only 42,528 are men. In Italy two hundred and forty-one alleged centenarian women are found for one hundred and forty-one men of the same age. In the ten-year statistical tables of New York, of the deaths of centenarians, seventy-two were females and only nineteen males. In Sweden the number of old women who exceed eighty years of age is to that of old men of the same age in the ratio of thirty-three to nineteen, and there are more women than men who have attained the age of eighty-six, in the ratio of almost two to one. In the last census of this country it is shown that of those over eighty years of age the females outnumber the males twelve thousand; of those over ninety the females outnumber the males twelve hundred; of those over one hundred years of age the females exceed the males one thousand. There is to-day in England over five per cent more females than males.

SEVENTEEN MEDICAL JOURNALS are published in New York City. Four are issued weekly, six monthly, one bi-monthly and six quarterly. Ten are on general medicine and surgery, the rest on special departments.—*Med. Annals.*

ALCOHOL: ITS EFFECTS UPON THE HUMAN SYSTEM.

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[*Read before the Missouri State Medical Association, Jefferson City, May 17, 1883.*]

BY resolution at our last meeting, it was ordered that a committee be appointed to report the known effects on the human system of alcohol and alcoholic beverages—brandy, whiskey, wine, beer, etc.

I presume that this related to the physiological, therapeutical and pathological effects of alcohol. Duchek, after thorough and elaborate experiments, arrived at the following conclusions as to its effect on the blood:

"1st. Alcohol in the organism is subservient to an increased combustion, the intermediate products of which are found in the blood.

2nd. Intoxication is dependent on the existence of aldehyde in the blood at the time. Brocher does not admit the existence of aldehyde in the blood.

3rd. The effect of aldehyde in the blood is that of rapid consumption of oxygen, thereby interrupting the combustion of other articles."

Its effects on the white corpuscles of the blood are to first increase and then diminish their ameboid movement. Just what effect these changes have on the body in construction of tissue is not known. Its effects on the red corpuscles are to lessen their power to give off oxygen, therefore must more or less diminish the oxidation of tissue. Now functional activity of the organs, and the production of heat in the body, depend on oxidation within them. It is obvious, therefore, that the effects of alcohol would be injurious. This would not be true if only a small amount was taken, because the injury would be counteracted by increased impetus given to the circulation by the effect of the alcohol. If this be true, we see

plainly that there is actual harm done to the system by increasing the circulation, because it is only the expenditure of the reserved force which only overcomes the injurious effects of the alcohol at the expense of the general system.

If it is frequently taken, there will be an accumulation and deposit of fatty matter; because the alcohol prevents its combustion, as well as the combustion of other articles which might result in fatty degeneration of the organ.—(*Braithwaite's Retrospect*, part 73, page 233. Brunton.)

What becomes of alcohol after it enters the system? Experiments made by Lallemand, Perrin and Duroy, most carefully conducted, with no object except to arrive scientifically at the truth, have yielded the following results: That alcohol did not remain more than thirty-six to forty-eight hours after it was taken into the system; that it did not assist in tissue construction; that it remained as alcohol until it was removed by the various emunctories, lungs, kidneys, skin, etc.

Later experiments were made with the same object by the late Doctors Anstie and Dupe, with opposite results; they affirming that it remained in the system for a long time, permeating all the structures, especially the nerve tissue, and that it was finally consumed by combustion, at the same time admitting that the larger quantity was removed by the emunctories. That these investigators do not however assert that alcohol in any way enters into the construction of tissue is a significant fact.

On the issue between these distinguished gentlemen the medical profession is divided about equally as to numbers and ability, both in this country and in England.

Is it a food? We understand food to be that which, when taken into the system, furnishes material for the repair of tissue consequent on the metamorphosis produced by functional action, thereby perpetuating the organism, at the same time adding to the reserve force of the system. Again we find scientists differing on this question.

Dr. Lionel S. Beale (*Braithwaite*, part 65) says: That alcohol is not a food, but that it enters into the circulation as alcohol, and is finally disposed of by combustion, and by breaking up and entering into combination with the fluids and solids of the body. Dr. B. W. Richardson (*London Med. Times and Gazette*) says that alcohol is an agreeable temporary shroud; that there is no evidence at any stage of the action of alcohol that there is any increase of power in the organism; its influence is to reduce the temperature and check waste, but never sustaining as food. On the other hand, that alcohol is a food, Dr. Hammond has furnished the most positive evidence of any one that I know of, yet his is far from conclusive, and will not admit of close analysis. Nor do I think that the scientific world accepts it as such. Dr. Flint, in his *Physiology* (volume on Alimentation), says: "Alcohol is capable of being absorbed and taken into the blood; and it then becomes a question of great interest to determine whether it is consumed in the economy, or whether it is discharged unchanged by the various emunctories." He accepts the experiments of Lallemand, Perrin and Duroy as correct in this, that all the alcohol is removed from the system by the emunctories within thirty-six to forty-eight hours after being taken. Furthermore, that in the present state of our knowledge alcohol cannot be regarded as an aliment, and that it could not take the place of articles which are assimilated; that it diminishes the exhalation of carbonic acid, and to a certain extent arrests nutrition.

When the organism can be supplied with food, alcohol is undoubtedly injurious. When the quantity of the food is insufficient, it may for a short time supply a want; but the effect, if continued under these circumstances, shows that it cannot take the place of other food. Further, in no quantity does it increase the power of endurance, but lessens it, either under heavy strain from mental or physical labor, as citizen or soldier. Nor does it increase our power to resist low or high temperature. In the *Brit.*

Med. Journal, June 14th, 1862, page 629, its editor says: "We possess no evidence for the assertion that alcohol is in any way a food. Further, we have no hesitation in saying that in the present state of our knowledge to call alcohol a food is to abuse the English language."—(*Braithwaite*, 46.)

In the *Edinburg Med. Journal*, May, '61, page 961, Dr. W. F. Gardner, physician to the Royal Infirmary, says that wine and alcohol are stimulants and tonics; that is, medicine, and not food properly so called. (*Braith.*, p. 44.)

In the *London Medical Record*, Feb. 10th, 1875, Dr. H. B. Richardson, in a summary of the effects of alcohol, says: "It is neither a food nor drink suitable for man's natural demands." (*Braith.*, page 71.) The great original investigator and physiologist, Dr. Carpenter, than whom there is none more careful in investigations or more truthful in statements, has declared that in no case can alcohol be classed as a food, because it does not restore nerve matter or any other structure, but, on the other hand, tends to destruction. In fact, he regards it as a poison.

Lastly, on this part of our question, I would introduce that which I consider the most positive and conclusive evidence of the fact that alcohol is in no sense a food, viz.: Whenever men have been called on to endure excessive strain, mental or physical, those who did not drink alcohol at all endured it much better and longer.—*Park's Hygiene.* The same is true in regard to extremes of temperature. Dr. Kane and other Arctic explorers testify that those who used alcohol could not endure the severe cold nearly so well as those who did not drink it. The surgeons of the English army in India, under tropical suns, give the same testimony against alcohol. More than this, it is in no sense prophylactic against epidemic diseases, but, on the contrary, they who drink are the first to fall victims to such epidemics as cholera, yellow fever, typhus, etc.

These facts certainly carry with them the idea that alco-

hol weakens the organism of man, instead of strengthening it, as food would do. We all remember the fearful mortality in our cities from sun-stroke a few years ago, and to some extent every year. Here we again find the debilitating influence of alcohol, as indicated by the fact that in all the cities from fifty to eighty per cent of those who died from the effects of sun-stroke were moderate drinkers.

In summing up the facts as presented by the best investigators on this subject, and sifting them by reason and philosophy, we are forced to conclude that alcohol is not food. The amount of alcohol that may be taken within physiological bounds is about one ounce daily (*Parks' Hygiene*) for the average healthy man; yet the English surgeons in the late Ashantee war found that this amount, issued to the men as a ration daily, had the effect to materially lessen their endurance, and it was consequently withdrawn, after which there was a decided improvement in the health of the soldiers. (*Parks' Hygiene.*)

In regard to the therapeutical effects of alcohol, we find that authors differ as to its classification. Some consider it stimulant; some, narcotic; others, anesthetic and poison. In fact, it may fill all these conditions, depending on the amount taken. You can stimulate with it, you can narcotize with it, you can produce profound anesthesia with it, or you can poison with it. The length of time necessary to produce these effects depends on the rapidity with which it is passed into the system. Its effects are never cumulative, like those of digitalis, yet its effects are sure and positive, when long continued in stimulating doses or potations, producing pathological changes in the organs and tissues of the body, especially the heart, liver, kidneys, lungs, mucous membranes of the gastro-intestinal canal and nerve centers. As a stimulant its action is prompt and positive, yet transient. When swallowed, its first effect is that of an irritant, and by reflex action the heart beats are increased in frequency and force. Its affinity for water

is such that it is rapidly absorbed, passing into the blood. Its next effect is hyperemia of the brain, attended with mental exhilaration or inebriation. If the quantity is frequently repeated we next have narcotism, attended with paralysis of the nerves of sensibility and of motion, with mental aberration, indicated by loss of memory, reason, judgment, and the moral attributes, with a decided exaltation of the vicious propensities. If the amount is continued, we have anesthesia to such an extent as to make the patient able to bear a severe surgical operation. Next comes the stage of poison, from the effects of which many have died, especially if exposed to low temperature. It lowers the temperature, but not until the stage of narcotism is approached. If as a stimulant it is continued too long, we have the secondary effects, the results of the effects of oxidation, and exhaustion, which necessarily follow over-action, muscular and mental, caused by hyperemia of the brain and stimulation of the heart. In this condition the temperature is lowered. To a certain extent, limited, it retards waste of tissue.

The fumes of alcohol readily enter the system through the lungs by inhalation, passing directly into the blood, carrying with it water taken from the tissues through which it passes. It is absorbed by the skin, a mode by which it can be given in the later stage of gastritis. It is also rapidly absorbed when diluted and injected into the rectum. When administered by the mouth, its effect on the mucous surfaces is that of an irritant, corrosive poison, unless largely diluted, because of its affinity for water and albumen. It is usually administered diluted, as brandy, wine, beer, cider, etc. Bouchardat and Sandras say that it enters the system, when taken into the stomach, through the gastric and intestinal veins, while none of it is taken up by the lymphatics and lacteals. (*Ziemssen*, 17, page 383. Alcohol produces precipitates in gastric juice. (*Ziem.*, 17, page 385.) While most authorities admit this to be the effect of alcohol when taken into the stomach,

yet we find that many recommend it in indigestions, which seems to me unphilosophical. While we admit that the presence of alcohol in the stomach, by its irritating effect, increases the flow of blood to the part, and a rapid transudation or secretion of a watery fluid, there is no evidence that this fluid has any of the elements of the gastric juice. My personal observations are that alcoholic stimulants retard digestion, and are not admissible in the indigestions, but are positively hurtful, especially in that large class of dyspepsias depending upon chronic inflammation and ulceration of the stomach. These views are supported by Claude Bernard, who found that he could arrest digestion in the stomach of a dog, after it had commenced, by introducing alcohol into the stomach. Also, if alcohol and food were taken together, digestion began a little later than in those who did not take alcohol. The same was true of the secreting glands of the stomach. The secretion of gastric juice was almost wholly suspended after taking spirits of wine. (*Ziem.*, 17, page 388.) Shall we give it in tuberculosis of the lung in the first stage? Here we have two questions to consider: Is it preventive or remedial? As to its being preventive of the formation or deposit of tubercle the profession is divided; the preponderance of evidence, however, is decidedly against its preventive power. Besides individual opinion, we have the assertion of B. W. Richardson that the free use of alcohol tends to the destruction of lung tissue. He says there is a form of phthisis caused by alcohol. (Birmingham Library, 1882, page 141.) More than this, the hospital reports of all countries contain a large number of cases of phthisis, the cause of which is said to be alcohol. During the formation of tubercle, or the first stage of tuberculosis, we have increased temperature, increased heart action, which in his opinion would contra-indicate the use of stimulants. It may be remedial in the latter stage, because of the feebleness of heart action and rapid waste of tissue: it should then not be given too frequently nor in large quantities.

It is contra-indicated in all cases of phthisis in which the mucous membrane or glands of the stomach or duodenum are implicated, which unfortunately is the condition in a large majority of cases. Moreover, tubercular consumption is a disease characterized by great waste of tissue, and we have before shown that alcohol does not furnish any material for repair of waste tissue, therefore it is not indicated for this reason. We admit that it arrests to a limited extent retrograde metamorphosis of tissue; but to get the benefit of this effect it has to be given in large quantities and continuously, and in protracted diseases like phthisis we would be in the danger of producing a worse disease, that of alcoholism, with all its debilitating attendants, which would undoubtedly be extremely injurious to the lung disease, hastening a fatal result. In zymotic diseases, facts do not show that alcohol is either preventive or remedial, except in their latter stages. Its known germicide property would seem to indicate its use, yet clinical facts do not furnish such evidence; but, on the contrary, it is known that in every epidemic of cholera, or yellow fever, that has prevailed in the United States, spirit drinkers were the first who were attacked, and a hard drinker rarely recovered.

It should not be given in any chronic disease, especially those implicating the nervous system—neuralgia, neurasthenia, etc.—for two reasons: First—we have remedies which are far better, not attended with the fearful danger of creating the habit or love of strong drink. This caution I conceive is of first importance, so far as nervous diseases are concerned. I have witnessed a number of confirmed drunkards, *made* by physicians ordering whiskey in cases of neuralgia, neurasthenia, insomnia, etc. Beside this, its continuous use produces a change in the organism which demands its continuous use, and there are but few men who have the will power to cease using it after this period. That it is contra-indicated in the active form of inflammation there can be no doubt; yet in the latter

stage, where there is much weakness of heart action, it may be indicated.

We would restrict its use to acute diseases of an adynamic type, or those which assume this type, as characterized by anemia of the brain, feebleness of heart action, or paralysis of the vaso-motor nervous system, attended with a tendency to passive congestion: its action in these conditions is beneficial, because it stimulates the heart to further exertion. Calling forth reserved force, it equalizes the circulation by filling the capillaries with blood. Time is the great consideration in these diseases. They are all self-limited, and we use alcohol to tide over the rough sea until the storm has spent its force; not that it is at all curative, for it is not. Its use is beneficial in cases of severe nervous shock.

While it is the accepted practice of most physicians to use alcohol freely in typhoid, typhus and typho-malarial fever, and many cases of pneumonia, yet it is not universal. Dr. Higginbottom, F. R. S. Lond., Nottingham, England, believes alcoholic stimulants, if not dangerous, are at least injurious in typhoid and typhus fever, and should never be administered in any acute disease, as they render them less manageable. He also states that he has abandoned the use of alcohol for over twenty years in typhoid and typhus fever, with most flattering results, and concludes his remarks by saying: "In my opinion, and from long experience and observation in the practice of medicine, its administration in typhoid fever has always been injurious and often fatal in its effects. Doctor B. W. Richardson, F. R. S. (*Braith.*, xxxvi), has experimented both in private and hospital practice, treating these forms of disease with very encouraging results without the use of alcoholic stimulants, reducing the death rate far below what it was while using alcohol. The tendency of the medical profession is to lessen the amount of alcohol given. There can be no doubt that great injury has been done by over-dosing with it. We hope in the near future

that a substitute will be found for it, attended with less danger of a cultivated desire to abuse the remedy. The baneful effects of alcohol are nowhere more distressing than when shown by a transmission of a love for it from parent to child. Worse than this, parents who are confirmed alcohol drinkers are liable to beget children who are epileptic, idiotic, or who suffer from various nervous diseases. The late Dr. Anstie, F. R. S. (*Reynold's System of Medicine*, page 675), says: "In the course of a large experience with alcoholism, among the hospital out-door patients, I have been greatly struck with the number of drinkers who have informed me that their relations, either on the paternal or maternal side, have been given to drink. I believe that things often work in a vicious circle to this end, and that the nervous enfeeblement produced in our ancestors by great excesses in drink is reproduced in their various descendants, with the effect of producing insanity in one, epilepsy in another, neuralgia in another, alcoholic excesses in a fourth, and so on." In Bucknill and Tuke's work on *Insanity*, M. Lunier is quoted as follows: "He estimates that 50 per cent. at least of the idiots and imbeciles in great cities have fathers who are drunkards, or were begotten by parents while intoxicated."

The pathological results of spirit drinking. Among the first to be produced is acute catarrh of the gastric and duodenal mucous membrane. Many of these cases are associated with mania a potu; in fact, we rarely have this condition without gastric and duodenal catarrh. Next, chronic inflammation of the gastro-intestinal canal, often ulceration at various points. The liver is sure to become affected, either with fatty degeneration or cirrhosis, or both. The same is true of the kidneys. The blood vessels are liable to become affected with atheroma; their coats may be so weakened as to produce aneurism, especially of the aorta. (*Reynolds' System of Medicine*, vol. ii. page 837.) The blood vessels of the brain are particularly liable to become diseased, interrupting the nutrition of the

organ, often rupturing, and producing death. It also affects the cell structure of the cerebro-spinal system. "The nerve centers to which the poison has access have their functions stimulated and increased at first, and then their activity is gradually more or less perfectly abolished for a time." The extent to which alcohol affects the nervous system is by no means restricted. Its domain is a wide one. If the results are limited to the cortical portion of the brain in the first instance, they may be gradually extended so as to embrace all the central organs—the centers of motion, of sensibility and consciousness. The medulla oblongata and the spinal cord may be involved in the action of the poison.

Again: alcohol must be ranked with those narcotics which, after long continued use, leave behind them permanent and enduring changes in the bodily organs. (*Ziemssen*, vol. xvii., pages 385 and 386. The muscular structures suffer from degenerative changes, especially the heart. It also tends to produce phthisis pulmonalis. (B. W. Richardson, *Birmingham Library*, page 141.) The eye and optic nerve also suffer from degenerative changes. Amaurosis and amblyopia may be caused by it. (*Stelwag*, page 219.) It produces all the various forms of paralysis of the cerebro-spinal system. The constant accompaniment of chronic alcoholism is paralysis agitans. The older writers only recognized one disease as the result of alcohol, viz., mania a potu, but recently the profession has coined and accepted another term, viz., alcoholism, acute and chronic. The acute represents delirium tremens, with or without gastric catarrh. The chronic is so protean in its manifestatation that it would be difficult to describe it accurately, yet it is not difficult to recognize it. It is always attended with pathological changes of the organism; one of the most frequent and distressing phenomena of alcoholism is that of mania, acute and chronic. It is sometimes impossible to recognize it in the milder form; reason and judgment may be so far intact as to

control the tongue and actions of the man for prudential reasons, self-protection, yet there may be an uncontrollable disposition on his part to commit any of the crimes in the decalogue. The law holds men responsible under these circumstances, when it should not, because the brain is diseased—it may be from hyperemia, or organic cell change, as has been shown before. In many, the insanity takes on a more positive form, and is easily recognized. The frequency with which insanity is produced by alcohol we will show by statistics. In England, 25 per cent. of all the cases. (*Ziemssen*, vol. xvii. page 390; *Bucknill & Tuke*, page 100.) In Ireland it is much more common, because they drink more whiskey. (*Bucknill & Tuke*, pages 101.) In Europe the proportion ranges from 20 to 25 per cent., dependent on the character of spirit drank. In the United States it ranges from 25 to 50 per cent. (*Bauduy*, page 107.) M. Lunier, in regard to the effects of the various kinds of intoxicating drinks in producing insanity. arranges them in the following order: Alcohol from cider, alcohol from beet root or grain, then cider, wine, beer and white wine. He states that the white wines are far more pernicious than the red wines. He farther states that insanity, idiocy and imbecility are always in proportion to the amount of alcohol consumed by a people.

The annual mortality in the United States from the effects of alcoholic stimulants is seventy thousand (70,000). It is fair to estimate that the amount of crime traceable to the effects of alcoholic stimulants, taking all those nations who use it, is about 25 to 50 per cent. The relation between spirit drinking and crime is a very interesting and important medico-legal question, for two reasons: First—as citizens of a civilization never equalled in the history of the world, it is our duty to reduce crime of all kinds to the smallest extent possible. Secondly—As physicians we are called upon in the courts of justice to decide as to the responsibility of prisoners at the bar for crime committed by them while suffering from the effects of acute or

chronic alcoholism. Heretofore there has been much division of opinion in the medical profession as to the responsibility of prisoners under these circumstances, very much to the injury of the ends of justice, to say nothing of the disgrace to our profession. This difference can be and will be abolished by a thorough exposition of all the facts investigators have furnished us. Therefore let me suggest that this body appoint a committee, composed mainly of neurologists, to investigate this question and report at our next meeting.

In this report I have consulted and quoted from the following authors:

From the German—Boehm, Nothnagel, Eulenburg, Russmaul, Huguenin and Hitzig. (*Ziem.*)

From the French—Claude Bernard, Lallemand, Perrin, Duroy, Dupe and M. Lunier.

From the English—Bucknill & Tuke, Maudsley, Richardson, Brunton, Higginbottom, Tanner, Carpenter, Headland, Gardner, Anstie, Christison and Reynolds.

From the American—Flint, jr., H. C. Wood, Bartholow, Bauduy and Stillé.

THERAPEUTIC ADDENDA—LISTERISM (ENUCLEATION OF SARCOMATOUS BREAST AND OVARIOTOMY), DIPHTHERIA, BRONCHITIS, ASTHMA, PILOCARPIN.[1]

BY A. S. V. MANSFELDE, M. D., *Professor of General Pathology and Histology, Omaha Medical College, Ashland, Neb.*

WHEN, on parting at Hastings, I promised a contribution to your section, I hardly imagined the importance of the responsibility with which my courtesy had charged me. Many have been the thoughts which I have bestowed upon the "How to fulfill my promise"—

[1] Published in advance from "Proceedings for the Year 1883–4," by permission granted by the Nebraska State Medical Society.

and all of them fruitless, until I read in a lecture of Professor Roberts Bartholow, entitled "Cui Bono?" and delivered as an introductory at the Ohio Medical College, October 1st, 1872, the following: "The therapeutics of to-day rejects dogmas, and the therapeutics of the future will accept nothing which cannot be demonstrated by the tests of science. No longer faith, no longer a blind experience will suffice, but keen observation, guided by knowledge and every appliance of science, will be demanded. To the results that have been accomplished, to this hopeful future, as foreshadowed in the work of the present, do we point, when assailed by the skeptics within, who simply have doubts, but do not attempt to resolve them." * *

Reading this quotation, I was reminded of an every day occurrence, very deplorable and altogether inexcusable, the assertion of physicians "that therapeutics is, after all, only guess-work, and not happy guess-work all the time either." How can men, to whose hands the health and lives of their patrons and friends are intrusted, give utterance to such thoughts and expect any other conclusion from those impressed with the rapid and vast advances that scientific therapeutics has made during the last decade, as portrayed by the prophetic words of Professor Bartholow, than that *theirs* has been the fate of Rip Van Winkle, or worse, that they have never tasted of the fruit from the tree of knowledge.

In surgical therapeutics, Listerism—meaning thereby the methods employed to protect the patient, during and after an operation, from foreign substances which may create or hasten the establishment of suppuration or putrefaction, and all the long train of consequences which will make that operation unsuccessful or fatal—has made operations possible which but a few years ago the surgical world itself condemned as murder in the first degree. And Listerism has not only made them possible, but, with the excusable pride of success, its devotees point to the many lives saved by it. Yet of all the operations that I have

witnessed in my practice of sixteen years, I have seen but one, my own excepted, where Listerism received the slightest attention—and this was a successful ovariotomy!

I am not now referring to the methods employed in the practice of Mr. Lister, but to the translation of his grand principle to every-day surgery—modified as the case and circumstances may demand, yet the principle ever uppermost, the exclusion of foreign substances, of whatever name or nature, from the wound. A case or two in point may suffice to show that even without using the dressings of Mr. Lister his principle may still be carried out with the most pleasing results. Sept. 19th, 1882—I enucleated the entire breast for a round cell sarcoma. The tumor weighed 5 lbs. 7 oz. Its size necessitated some eight or ten sutures to close the greater part of the wound. The breast, operator's and assistants' hands, the instruments, sponges and water were thoroughly carbolized; so also was the wound, which immediately thereafter was covered thickly with iodoform; upon this a vaseline dressing was placed, to be covered with a thick layer of cotton batting. The result: no shock, no surgical fever, the temperature never higher than 101°, and the greater part of the wound healed by first intention.

October 19th, 1882. I removed from Mrs. T.— a multilocular ovarian tumor, weighing sixteen pounds and six ounces. Allow me to briefly recall the precautions taken to prevent septicemia and presumably death. The patient received on the evening before the operation ten grains of quinine. Every thing and every body coming in contact with the wound were most thoroughly carbolized, except the water used during the operation, which was as hot as my assistant could bear it on her hands. The room in which the operation was performed was converted into one of Mr. Tyndall's "*moteless chambers*" in the following manner: the floor, ceiling, walls, doors and windows were painted over with a mixture of water, glycerine and carbolic acid, and left undisturbed for half a day—then the

room was heated to ninety and more degrees, and the patient laid upon the table, the tumor removed in the usual manner. After all oozing had stopped, the stump being tied with braided silk, the wound was closed with deep and superficial horse-hair sutures—the deep sutures were braided, the superficial not. The wound was covered with a salve composed of vaseline and iodoform, prepared by heating the former and incorporating into it one drachm of iodoform, dissolved in sulphuric ether, to each ounce; this mixture was stirred until the ether had evaporated, and then was kept sealed until used in the operating room. Finally, the salve was covered with several layers of cotton wadding, which had been boiled in caustic potash, rinsed in hot water, dried in an oven, and immersed in an ethereal solution of iodoform, from which it was removed when called for as a dressing, the ether permitted to evaporate, and the wadding fully charged with iodoform used as already stated. The result was most gratifying—no shock. no fever, no suppuration of wound. The average respirations before the operation were 23 per minute, the beats of the pulse 106 per minute, and the temperature 98°, everything indicating a lessened vitality coupled with a low grade of inflammation. This was amply demonstrated by the condition of the patient as well as by the extensive peritoneal inflammation, accompanied by effusion, discovered upon opening the abdominal cavity.

From 3 o'clock P. M., October 19th, one half hour after the operation, to 8 o'clock P. M., November 11th, the average of 42 takings of the respiration was about 26½ per minute, of 54 takings of the pulse 103 per minute, and of 55 takings of temperature 99½° Fah. All these registers were verified by repeated observations, and most always two thermometers were used in taking the temperature. The highest number of respirations was 36, the lowest 21 per minute. The highest number of beats of the pulse was 126, and the lowest 84 per minute. The highest tempera-100⅘°, the lowest 98° Fahr. None of these markings point

toward any influence that the operation may have had upon the patient in any direction, and the good result was credited to the large dose of quinine preventing shock—the cessation of all oozing and the attempt to prevent septicemia by the means above indicated—absolute quiet and careful nursing. In fact, the higher temperature and respirations accompanied by a lower pulse were taken by the operator as signs of returning strength, and not as tokens of surgical fever.

A great deal has been written upon the subject of remedies for diphtheria. All the way from the insufflation of sulphur, as practiced by the laity, to the employment of caustics of various intensity, has ranged the armamentum against this fell destroyer of children. I am strongly inclined to believe, nay, have had the conviction forced upon me, that many of the successful cures of diphtheria owe their existence to mistaken diagnosis. Herpetic eruptions and ulcerative tonsillitis have materially swelled the percentage of reported recoveries. Sporadic cases of diphtheria should be looked upon with doubt—but when epidemic, with all the train of escort and followers, irresistibly establishing its horrid presence, then the conscientious physician views his therapeutic armor with dismay, and greedily accepts any suggestions offering help to both the afflicted—the doctor and his patient. Seven cases of diphtheria this spring permit me to justify a rehearsal of their treatment, particularly since in so doing I fulfill in part the object of this paper.

I am most emphatically an apostle of the stimulant treatment, *not* of *diphtheria* as is so often done, but of the *patient*, and not of the patient *in toto*, but of that part of the system which presides over the circulatory center and its nearest branches. Thus I deem it of the utmost importance to watch the pulse, as indicative of the heart's force, ever ready with quinine, belladonna and alcohol, par excellence the heart's tonics and stimulants—to sustain its sinking energies. These remedies looked at as curatives,

and administered because the patient has diphtheria, are greatly overrated and out of place, but given when indicated they prove the staff of life. Aside from the deaths which occur early in the disease, and peculiar to some epi demics—caused no doubt by that "subtle poison" the nature of which is still unknown, "which circulating in the blood saps the foundation of life" (Bartholow)—those deaths which occur, often after all throat lesions have subsided, are pre-eminently the consequence of an exhaustion of the heart's energy. The throat lesion is undoubtedly a local manifestation of a systemic poisoning, and finds its parallel in small-pox. Not that the *causes*, but the *processes* are identical. In diphtheria as well as in small-pox, the general disease, caused presumably by the multiplication of species of schizomycetes, localizes itself by the causation of embolic masses of micrococci, followed by necrosis ofthe part from which, by this cause, the circulation has been cut off. The caput mortuum both of small-pox and diphtheria contains the germs for a transplantation of the diseases provided the soil for their growth and development offers itself.

And these necrotic masses in both diseases, accompanied by nests of micrococci, occur in most any part of the body, yet they occur by preference, in the case of small-pox, in the skin and in diphtheria more often in the mucous membrane of the buccal and respiratory tracts. The point, however, to which I beg to draw your attention is this, that in both diseases—and I think with good propriety in all infectious exanthemata—the poison invariably works its way from the center to the periphery—from the blood stream to the oxygen bathed exterior. If a living organism (as is now taught), it may change its nature by reason of the new environment, or the plague of mucous membrane, changed by the disease into necrosed tissue, may become the soil for other species inhaled with the air, but more likely both conditions exist, and furnish the ever present micrococci, propagators of the disease and unquestionably inducers of the coalition of the originally distinct

spots of dying tissue, by their rapid multiplication and consequent involvement of the yet healthy intervening membrane. Now, the conditions to be met are two-fold, paresis of the nutrient vessels supplied by the cardiac branches of the vagus—in other words, the danger of death by exhaustion of the heart; and secondly, the spreading of the originally circumscribed local necrosis over large areas, and particularly of the mucous membrane of the larynx, trachea and bronchi. The former condition, the paresis, is best met, as already indicated, by quinine, belladonna and alcohol. The latter, the local manifestation of the disease, is checked and terminated by a judicious combination of an infusion of belladonna, lime water and oil of turpentine. These three can be associated and administered with very little inconvenience to the patient, a desideratum of no little moment in such cases.

A weak infusion of belladonna may be used for the purpose of slacking a piece of lime; when this process has been completed, the surplus fluid is decanted and some oil of turpentine incorporated with the slacked lime; when by trituration the decanted liquid is added and finally filtered, we now posses a saturated, terebinthinated lime water containing belladonna. This may be used often, or constantly as the case may warrant, by two methods—steaming and atomization. The former is readily accomplished by a frame over the crib, bed or chair, in which the patient or patients are comfortably placed, covered with a blanket or other impermeable substance—a gallon jar with the fluid and pieces of hot iron or brick. The latter method needs no description, being accomplished by the familiar atomizer.

This view of the nature of diphtheria very clearly explains the contradictory statements in regard to the action of pilocarpin and its salts. Some observers consider its administration dangerous practice—others laud it as *the* remedy. Both are correct. In the earlier stage of the malady, when the disease consists of a membrane the deeper

vessels of which are highly hyperemic, one can readily understand the benefit accruing from the administration of a remedy which paralyzes the vaso-motor nerves, and controlling the circulation thereby permits the establishment of normal relations between tissue and blood. But when the paresis of the nutrient vessels of the heart and its immediate branches threatens to destroy the function of that viscus, when belladonna becomes the chief reliance, how dares any one administer its physiological antagonist, pilocarpin, without anticipating death as a vivid demonstration of the law of cause and effect?

This paralytic action of pilocarpin upon the vaso-motor nervous system drew my attention to the possibility of the beneficial action it might exert in controlling bronchitic asthma. This terrible affection, whether caused by local irritation exciting reflex spasm of the bronchial muscles and the diaphragm, or by a neurosis which induces the local manifestations and changes—asthma, I say, is always accompanied by a tumefaction of the bronchial mucous membrane, which, no doubt, increases the difficulty with which the patient endeavors to expire the pent-up air from his lungs.

My theories very quickly found application. A chronic case, indeed one in which I had exhausted the pharmacopeia, and myself—sometimes the remedies successful, but more often the patient—took a severe turn. The patient, a middle-aged man, a miller by profession, had not slept for several nights, sitting in a chair, bent forward with his arms as props, endeavoring to satisfy his hunger for air. As a last resort, because I feared the depressing action of the pilocarpin upon his heart, I injected into his arm about one-fourth of a grain of it, with an equal amount of morphia; within ten minutes, by diaphoresis and ptyalism, large quantities of fluid were discharged, and within half an hour from the time of administration my patient was sound asleep in his bed, the most gratifying effect of medicine that I have ever witnessed. Since that time I

have repeatedly used the same remedy and always with the same result.

I have endeavored to give a demonstration of the truth that therapeutics, though a field with vast tracts yet uncultivated, still offers a rich harvest to the diligent husbandman. Do you not think that it would be of immeasurable benefit to the fellows of this society to have each one yearly cultivate a piece, a patch however small, and throwing the produce into the common granary, have us, at these our yearly "harvest homes," enjoy the luxury of a plentifully filled board? "Then no longer a blind experience will suffice."

In the discussion following my paper the question of treatment received the lion's share of attention. Cold water dressings to the neck; emollient applications to the diseased pharynx and adjacent parts, with a view to hasten the removal of the products of the malady, and also for the protection of the wounded membrane, such as lime water, glycerine and carbolic acid; cleanliness of the patient and his surroundings, nutrient food, alcoholic stimulants, quinine, iron, and chlorate of potash, seem to constitute the treatment mostly relied upon by our Nebraska physicians. And yet any one present must have felt that the many remedies suggested as helpful, in the hands of their advocates, were only means accidentally found useful, none of them bearing the impress of scientific therapy such as I endeavored to advocate in the preceding article. The indiscriminate use of pilocarpin, if any proof is needed, demonstrates fully the truth of my observation. And this deplorable state of affairs in the case of diphtheria, and indeed in the treatment of many other diseases, is owing principally to two causes, an ignorance of the factors concerned in producing the disorders, and a very vague knowledge of the changes which are produced in the tissue. Allow me to presume for illustration's sake, that bacteria are the cause of diphtheria; it becomes at once evident that

a knowledge of their life history, as well as the modifications produced by them in the body which they inhabit, is absolutely necessary to get indications for a rational therapy.

It is no longer doubted that in diphtheria, as well as in other diseases of a similar character, a stage of incubation intervenes between the moment of infection and the manifestation of symptoms, which are labeled in their grand total scarlet fever, measles, small-pox, or diphtheria. The sanitarian is concerned in the solution of the problem of *how to prevent infection.* The physician must endeavor to make infection harmless, and if not successful in this, try to make the consequences of the infection the least dangerous to health and life. I am sure the goal PREVENTION, though distant, will be reached some time; man's mind, in the aggregate, is infinite and omnipotent, therefore capable in the *future* to accomplish the impossible of to-day. Bactericides will come to our aid during the incubation period of the disorder, after we have become sufficiently expert in detecting the presence and work of the multiplying virus. Thus we will be able to *abort* the disease, the best work next to prevention. In the meantime it is our duty to conduct the disease to a speedy and happy termination. To do this successfully, it is necessary that we be familiar with the changes wrought in the body. The main pathological conditions, and consequent indications for treatment, I have hinted at in the paper above printed. I will here briefly allude to the throat lesion, and express my conviction that the so-called membrane of diphtheria in nowise deserves such a name; this should be restricted to laryngitis, with exudation or croupous inflammation of the laryngeal membrane. This is characterized by a loss, in the first place, of the epithelium lining the area inflamed; and, secondly, by the migration and rapid multiplication of cells and the transudation of blood serum: the destroyed cells furnish to the serum the material necessary for a coagulate, which forms the network of

fibers, between which numberless cells, denucleated and dead, are placed. This membrane, composed as described, is always super-imposed upon the hyaline basis membrane of mucous surfaces, only penetrating into the deeper tissues when this basis membrane is wanting, and then only as an inflammatory hyperplasia. It is otherwise with diphtheria; here no membrane forms at all, but the tissue, *in its deeper layers always* (whether this be upon the pharyngeal mucous membrane, or on wound surfaces in commencing hospital gangrene), becomes intensely congested, presumably induced by the presence of micrococci and phases of their development. The congestion is followed by inflammatory products, multiplication of cells, and an exudate *into* the tissue. Next, small areas of the superficial layers of the membrane are cut off from all nutrition; they die, and present the very characteristic picture of diphtheria, circumscribed plaques of so-called membrane. The intervening tissue next succumbs, if remedial agents have not succeeded in arresting the congestion and inflammation; the product, if examined, is composed, not of a new formation, as in laryngitis membranacea, but of a veritable "*caput mortuum*," the dead tissue plus the inflammatory products and the micrococci. The detachment of this "*caput mortuum*" takes place in the same manner as a slough elsewhere—a demarcation line forms (i. e., a reactive inflammatory proliferation of cells ensues, some to form pus, others to form cicatricial tissue), the dead tissue becomes detached, and an ulcer is the result. In membranous laryngitis, upon the other hand, a mucoid softening of the deposit and a washing away of the same by the secretions terminates its career. The epithelium often reforms marginally, before the entire membrane has been removed; in diphtheria this new formation of the epithelium is simply impossible. If my description of the local changes be correct, it becomes apparent that in the different phases of the local manifestation of the disease, different therapeutic measures become necessary, and

that one measure may be highly beneficial now, when later it may be entirely useless, nay, even injurious. The point that I desire to make is, that the remedies suggested are all of them proper in diphtheria, but have been so promiscuously used that happy results are more often the consequence of chance, which should not govern the administration of remedies.

INEBRIETY AND INSANITY.—Dr. T. D. Crothers concludes a paper on the Prevention of Insanity with the following propositions:

1. Inebriety is the largest factor in the causation of insanity, the study of which will point out the means to lessen insanity, and many of the conditions which lead up to it.

2. Inebriety is a physical disease which can be cured and prevented by the application of physical means.

3. The present theories and treatment of inebriety encourage the development of the disorder, and indirectly increase insanity, by intensifying all the conditions of disease and making recovery more difficult.

4. The rational treatment of inebriety should be to isolate the patients in special hospitals where every means can be gathered to build up and restore the entire organism.

5. In such hospitals a study of all the conditions which favor the growth of inebriety or insanity can be made, as well as the treatment and means of prevention, which could not otherwise be known.

6. The practical character and feasibility of such institutions are demonstrated in every advance of science in many ways, from actual experience, in face of the greatest obstacles and most discouraging circumstances.

7. Finally, although Utopia is not here yet, there is along this line of inquiry abundant evidence to show that the study of inebriety and its proper treatment will reveal the means for lessening insanity, beyond any present conceptions.—*Am. Psych. Jour.*, April, '83.

CASES FROM PRACTICE.

CASE OF RATTLESNAKE BITE.

BY C. W. BRYSON, M. D., FALLS CITY, NEB.

April 30th, 1883, I was called to the country to see the little two-year-old son, of Edwin Clore, who two days previously had been bitten on the right leg in front, and about two inches below the knee in three different places, by a large Rattlesnake. His parents had immediately bandaged his limb above the knee, and sent for their family physician.

I saw the case about four hours after the accident. His treatment consisted mainly in holding a heated iron to the bottom of the patient's foot, for the purpose, he said, of *drawing the poison out;* he anointed the limb with old *bacon grease*, left some *small pills* and went away, saying he would return the next day. On his return he ordered positively that the bowels should not be moved, for, as he said, that would favor the absorption of the poison into the system. He removed the bandage from the limb, and left orders to repeat the *hot iron process*, and if the case did not progress favorably to report to him. You well know the results without my stating that the child continued to grow worse of course. I was summoned about sixty hours after the wound was inflicted. I found the little patient suffering intense agony; the limb was enormously swollen up to the inguinal region; from the knee down, of dark color and *deadly cold*; above the knee the surface was of pale blue color, with phlyctenulæ and bullæ extending all the way up the limb and right side almost to the shoulder, and filled with a sanious fluid. There was great derangement of the nervous system, evinced by sudden terrors, great anxiety, depression and prostration, with constant vomiting of bilious material. The abdomen was tumid and cold. I was informed that the bowels had not moved for three days. I immediately ordered

gr. ij hydrarg. submur., with teaspoonful of oleum ricini, every hour for three doses, with soap-suds injections into the rectum as often. I then with my pocket lance made three incisions, entering my lance blade into each wound made by the serpent's tooth, and cutting to the bone, then downwards about one and a half inches. I then ordered a large flax-seed poultice over the wound, and also hot applications to the entire extremity. I also ordered a tablespoonful of whisky every three quarters of an hour, Fowler's liq. potass. arsenitis, gtt. viij., every two and one-half hours, with liquid food such as beef-tea, broths, milk and *lime water*. His bowels moved soon after the last powder was given; this seemed to relieve him, for he fell to sleep, but would start up with sudden terrors, and he seemed to have constant visions and broken dreams of *snakes*, and would beg piteously to his mother to take them away. Then he would suddenly sink into a state of partial unconsciousness, with low muttering delirium. He seemed to grow constantly worse, and when I saw him again the next day, about 2 P. M., I found him in a comatose condition, action of the heart so weak that the pulse was hardly perceptible, pupils dilated, extremities cold, face livid, with rigidity of the muscles; the swelling had extended into the abdomen and up the right side to the shoulder. I introduced my catheter and drew off about two ounces of dark colored urine, after which the patient rallied slightly, when I ordered the amount of whisky increased to a tablespoonful every half hour. I also gave tr. iodinii co. m. x., every three hours, and made a prescription like this:

℞ Tr. ferri chlor. - - - -
Acid. phosph. dil. - - -
Syr. limonis - - - - - - āā ℥i.

M. S. Forty minims every two and a half hours with three grs. quinia sulph. three times daily, and continued my treatment as before, depending on stimulants to quiet pain. On my return the next day I was astonished to find my little patient eating with relish a piece of soft bread that his mother had given him, and resting perfectly easy. He continued to improve under this treatment for four or five days, when I gradually decreased my dose of arsenic to m.j every three hours. You will note the enormous quantities of arsenic he was getting without any bad results, until on the fourth or fifth day I noticed

the edematous condition of the eyelids, which were swollen almost to close. I ordered arsenic stopped and the iodine diminished to m. ij every four hours. As the effects of the virus was being overcome, the system could not withstand the enormous quantities of iron, iodine and arsenic; as the poison was being neutralized the arsenic acted more directly upon the system, and the nerves were beginning to rebel, which was demonstrated by twitching of the muscles, dyscinesia, dyspnea and general unsteadiness of the nervous system. I simply relate this case as I think that under the circumstances the cure was a very remarkable one after the poison had taken such a firm hold upon the system. I attribute my success in this case to the large doses of iron, arsenic and iodine, the iodine and arsenic acting as a neutralizing agent upon the poison, the iron and phosphoric acid improving the impoverished condition of the blood, the whisky giving tone to the nervous system, assisting nature to repair the shock to the nervous tissues and the blood, and to sustain the forces of life until nature overcomes the poison, and casts it off through the different channels of escape from the body. This patient made a speedy recovery, and in a little over one week was running around the yard and has a perfectly healthy limb.

TRAUMATIC TETANUS TREATED WITH ARSENIC.

BY T. B. TAYLOR, M. D., CRYSTAL CITY, MO.

A healthy mulatto, about thirty years of age, of unusual muscular development, received a blow over the forehead with a spade, making an ugly wound, but not injuring the bone. Owing to the nature of the wound it healed slowly by granulation.

About five days after the injury was received, the patient was seized, somewhat suddenly, with severe pain in the chest, stiffness of the lower jaw, and a sensation of choking when attempting to swallow. When visited by me the spasms were frequent and increasing in severity, the jaws firmly fixed, deglutition difficult, and the sensitiveness to outside influences so great that the slightest noise or the blowing of the breath upon his breast would excite a violent spasm.

I prescribed liq. potassii arsenitis, 10 drops to be given every four hours. I left with the patient a vial containing about one half ounce of the medicine. I prescribed also chloral, a solution of which I prepared, and of which a dose was to have been given every hour. The patient's wife, to whom the directions were given, misunderstood them and gave the arsenical preparation every hour, and but one dose of the chloral, on account of the difficulty experienced in administering it.

Twenty-four hours after treatment was begun the spasms were infrequent and light, and the general condition of the patient much improved. I then discovered that the patient had taken over three drachms of Fowler's solution within twenty-four hours. As there were no unpleasant effects from the arsenic observable, I continued the medicine in ten-drop doses three times a day, for several days, until the patient was completely restored to health.

The case is interesting, as evidencing the tolerance of arsenic by the system of one suffering from tetanus, and also that any credit for the relief of the patient must be due to it alone, as no other medicine was used.

THE DOCTOR'S LIFE. I am not going to speak to you of rights and privileges, or of the popular notions of a physician's vocation, but of what it really is, as known to those who lead it. Certainly it is not an easy pursuit. It is a life of constant hard work, of many anxieties. To those who patiently wait for their chance in large cities and to whom gradually success comes, there comes also with that success an amount of labor which makes them strangers to their own friends and their own children. We all have our trials, no matter how placed. Interference, silly suggestions, blame, calumny, preference given to the shallow pretender, are the least of these, and the more easily borne; but who credits us with the awful responsibilities? Who takes into account the struggles of our failures? Who thinks of the wear on our sympathies? Who knows the humble toil, the physical labor, the mental strain, of him whose name may be in every mouth in a metropolis.—Prof. Da Costa's Valedictory, *Med. Bul.* May, '83.

EDITORIAL.

THE INTERNATIONAL SANITARY COMMISSION—THE GENEVA CONVENTION.

The establishment of the Geneva Convention of 1864, now subscribed to by the different governments of Europe, by the United States, and by Asiatic and South American powers, illustrates with singular distinctness the practical humanitarian spirit of our times. This convention in its Articles provides for the more efficient care of the wounded in armies by voluntary associations similar in nature to the Sanitary Commission of our civil war. America has the honor of having first shown the way for effective mitigation of the horrors of war by the intervention of organized charity upon the battle-field itself, to say nothing of the care of the sick and wounded soldiers in hospitals completely furnished and maintained at private cost. Never has the Christian spirit more positively declared itself, nor labored to a more noble purpose, than in that grand mission which carried a nation's mercy and charity into the midst of the carnage of battle and pestilence of the camp. Never did humanity make louder nor more telling protest against the barbarity and brutishness of war.

The Geneva Convention may be termed an International Sanitary Commission. It insures the neutrality of field hospitals and military hospitals, and of agents and employés covered by the badge of the convention; the badge, in honor of the Swiss confederacy as originator of the idea of the convention, to be a red cross on a white field. In addition, a premium is offered the inhabitants of the region visited by war for the the exercise of humanity towards the wounded, by promising

protection to householders giving them shelter, and exemption from the quartering of troops, as well as from part of the requisitions of war that may be imposed. Already the convention has had its merits put to the test of actual proof; the bloody wars in Europe of 1864, 1866, and especially the Franco-Prussian of 1870, have fully demonstrated its usefulness, so that now the whole of Europe is organized under the flag of the red cross of Geneva—a moral crusade of all the nations against the present armaments of war. Before a shot had been fired in the terrible campaign of 1870, a body of trained agents of the international committee had entered the field, with power under the common treaty to go wherever their duty called. Their equipment and supplies were held sacred, and their efforts were seconded by both belligerents; contributions poured in upon them through responsible channels, which in their final disposition were accurately accounted for to the nations sending; there was no waste, delay, nor misappropriation.

The adhesion of the United States to the Geneva Convention lends it additional force, though we shall hope that it will be only moral force so far as concerns the care of troops under our flag. By this act the United States has properly signified its sympathy with one of the grandest efforts to relieve suffering, and has renewed its pledge, in a wider sense, not to allow the clamor of war to drown the appeal of humanity.

Our Sanitary Commission ceased to exist with the necessity that created it; this was unfortunate; so well organized and efficient a benevolence should have been continued in part at least. Pestilence, fire, flood and tornadoes in different parts of the country have demonstrated again and again the need of an organized body prepared to collect and distribute aid in such emergencies that completely overwhelm local resources; money and material are lavishly given, but for lack of or-

ganized care are liable to waste and to delay in reaching the needy. The medical profession is particularly concerned in this matter, since these catastrophes make special demand upon its strength and sympathy. It is proposed to establish throughout the country organizations of the Red Cross (the badge of the international committee), to meet the obvious necessity at home. The national center will be at Washington, and will represent the United States in the general body; each state will have its own branch center, with ramifications throughout its territory. Thus we shall be prepared to cope with disasters, domestic and foreign, the local associations caring for their own neighborhood, but in case of extraordinary distress drawing upon the state, and this in turn contributing upon call of the national center to relieve calamities of the first magnitude, like the Michigan fires of last summer, the yellow fever plague in Memphis, the floods in the Mississippi Valley. Such a complete organization will insure prompt, efficient and trustworthy action, and by inspiring confidence will conduce to wider and more liberal contributions in times of calamity. Already associations have been formed and been in most efficient action in the East and South; recently one has been organized in St. Louis. The memory of the Sanitary Commission is too fresh to need argument in support of its restoration, the necessity is admitted. The inspiration of America's humanity and inventive spirit has been adopted by civilization abroad, and now returns to us to be reinstated as a vital factor henceforth of our daily life. T.

THE THING TO BE DREADED in professional life is that we gradually become more and more incrusted with common place. There is but one way of avoiding this and the mental wasting that follows it, to have aspirations beyond our immediate pursuits. This may be of more than one kind, according to tastes, opportunities, or natural gifts.—Prof. Da Costa's Valedictory to Class of '83. *Med. Bul.* May, '83.

BOOK REVIEWS AND NOTICES.

HOW WE OUGHT TO LIVE. BY JOSEPH F. EDWARDS, A. M., M. D., etc. *St. Louis: John Burns.* 1882. 8vo., pp. 639; cloth.

This volume is addressed not to the profession but to the laity, and is intended to give plain, common sense directions to the readers for taking proper care of themselves and their families. It contains directions for the care of infants and children, for the arrangement of houses and grounds, for drainage, ventilation; how to work, eat, exercise, bathe, sleep and dress. He strongly opposes the use of tobacco and alcohol in every form.

Dr. Edwards has presented wholesome truth in a manner well calculated to interest and impress the ordinary reader, and though the style is perhaps somewhat exaggerated at times, the tendency of the book is on the whole quite satisfactory.

THE DISPENSATORY OF THE UNITED STATES OF AMERICA. BY DR. GEO. B. WOOD AND DR. FRANKLIN BACHE. Fifteenth edition, re-arranged, thoroughly revised and largely re-written, with illustrations. BY H. C. WOOD, M. D., JOSEPH P. REMINGTON, Ph. G., and SAMUEL P. SADTLER, Ph. D., F. C. S. *Philadelphia: J. B. Lippincott & Co.* 1883. 8vo., pp. 1,928; sheep, $8.00.

Three years diligent work have been devoted by the revisers to the work of preparing this fifteenth edition of the United States Dispensatory. Some changes have been made in arrangement. The first and second parts of preceding editions are in this combined in one, arranged alphabetically. The former third part is in this the second, and the third part of this edition contains such matter as was formerly given in the appendices, together with some new miscellaneous matter, official tests, tables, analyses of mineral waters, etc., etc.

There is a large amount of new matter included in this edition; and one feature which is novel and valuable is the indication of the correct pronunciation of the various officinal titles,

the words being divided into syllables and the sounds of the letters and the accent being indicated by appropriate marks.

Not much change was found necessary in the descriptive materia medica, but the introduction of illustrations is a valuable improvement. The account of the medical properties and uses of drugs is in great part newly prepared, and shows the evidence of the views of the senior editor who had charge of the revision of that part of the work. In this revision it has for the first time been practicable to have the different departments of the work revised by those who were especially qualified for their task by study and previous work. Here we see the advantage of having the chemical parts revised by an expert chemist as is Dr. Sadtler; while the pharmaceutical details are formulated by the experience of Prof. Remington, and are almost wholly rewritten, as was in fact largely necessitated by the changes in the new pharmacopeia, whereby the working formulæ are arranged according to the parts by weight.

The doses are given in the same manner as in former editions, with the metric equivalents added in parenthesis.

The work is exceedingly creditable to editors and to publishers.

PHYSICAL EXPLORATION OF THE LUNGS BY MEANS OF AUSCULTATION AND PERCUSSION. BY AUSTIN FLINT, M. D., etc. *Philadelphia: Henry C. Lea's Son & Co.* 1882. 16mo., pp. 83. (J. H. Chambers & Co., St. Louis.)

This little volume consists of three lectures delivered by the distinguished author before the Philadelphia County Medical Society. The well earned fame of Dr. Flint as a teacher and as a writer on physical diagnosis is a guarantee of the excellence of his work. He has condensed in a small space the most important principles and the practice of physical exploration of the chest. Avoiding the obscurity and abstruseness with which so many writers envelop the subject by over-refinements of diagnosis, Dr. Flint gives the reader in pleasant conversational language many hints as to the proper manner of study, and endeavors to point out the real value of the different physical signs of disease.

These lectures should be read by every student of medicine, that he may fully appreciate the true value of a physical exploration of the lungs. G.

SEVENTH BIENNIAL REPORT OF THE BOARD OF STATE COMMISSIONERS OF PUBLIC CHARITIES OF THE STATE OF ILLINOIS.

The most interesting part of this report is that referring to state care and provision for the insane, and giving an account of the new institution for the care of the insane, located at Kankakee, in which the cottage plan has been adopted, instead of the common plan of having an immense hospital with many pavilions and wards. The result of the experiment thus far is very satisfactory. Several pages are given to a careful consideration of the proper mode of determining whether patients should be sent to an asylum or not.

THE MEDICAL AND SURGICAL HISTORY OF THE WAR OF THE REBELLION. Part III. Volume II. Surgical History. Prepared under the direction of JOSEPH K. BARNES, Surg. Gen. U. S. A. BY GEO. A. OTIS, Surg. U. S. A., and F. L. HUNTINGTON, Surg. U. S. A. *Washington: Government Printing Office*, 1883. 4to., pp. 986. xxix.

This volume of the invaluable series is of the same character as those which have preceded it. It deals with—

Chapter X. Wounds and Injuries of the Lower Extremities, in seven sections: I. Flesh Wounds. II. Wounds and Injuries of the Hip Joint. III. Injuries in the Shaft of the Femur. IV. Wounds and Injuries of the Knee Joint. V. Wounds and Operations in the Leg. VI. Wounds and Operations at the Ankle Joint. VII. Wounds and Operations in the Foot. Chapter XI. Miscellaneous Injuries. Chapter XII. Wounds and Complications. Chapter XIII. Anesthetics. Chapter XIV. The Medical Staff and Materia Chirurgica. Chapter XV. Transportation of the Wounded.

These volumes of medical and surgical history constitute a work of which the medical profession in the United States may justly feel proud, in that such a work is produced by our own Government.

THE BACTERIA. BY T. J. BURRILL, Ph. D. Champaign, Ill. Published by the author. 8vo., pp. 65, paper, 50 cents.

This is a concise statement of the modern received views with reference to these microscopic organisms, containing account of some observations made personally by the author, and also containing a list and description of the various bacteria so far catalogued.

LIFE ON THE MISSISSIPPI. BY MARK TWAIN. With more than 300 Illustrations. *Boston: Jas. R. Osgood and Company.* 8vo., pp. 624, cloth, $3.50; cloth, gilt, $4.00. *Jas. H. Chambers & Co.*, 3rd and Locust Streets, St. Louis, Gen. Western Agents.

In no sense can this volume be considered a medical work as the words are ordinarily used; and yet in the strength of our conviction that a light heart and a cheerful expression of face in a physician are among the most valuable and efficient of the agencies that he wields for the relief of his patients, and that a hearty laugh over an amusing incident or a new interest aroused is often the best medicine for a mind diseased, or for one convalescent from serious illness, we think our readers will thank us for calling their attention to this new volume from the pen of that king of American humorists, Mark Twain.

There is something irresistibly fascinating in his sketches of boat life on the river, and of his experiences in "learning the river" when he was a pilot's apprentice or "cub."

We cannot take more space to notice the book; but if you are going to have a vacation this summer, would recommend taking the book along to read then. If you are not going to have a vacation, the next best thing will be to read "Life on the Mississippi" instead.

BOOKS AND PAMPHLETS RECEIVED.

Therapeutic Handbook of the United States Pharmacopœia. By Robert T. Edes, A. B., M. D. New York. Wm. Wood & Co. 1883. 8vo., pp. 397; cloth. (Through H. R. Hildreth Printing Co.)——The Microscope and its Revelations. Vol. I. By Wm. B. Carpenter, C. B., M. D., LL. D., etc. Sixth edition, illustrated by 26 plates and 500 wood engravings. New York: Wm. Wood & Co. 1883. 8vo., pp. 388; cloth. (Through H. R. Hildreth Printing Co.)——International Encyclopedia of Surgery. Edited by John Ashhurst, Jr., M. D. Illustrated with chromo-lithographs and wood-cuts. Vol. III. New York: Wm. Wood & Co. 1883. 8vo., pp. 760; sheep. (Through H. R. Hildreth Printing Co.)——Medical Nursing. By J. Wallace Anderson, M. D. Second edition. New York: MacMillan & Co. 1883. 16mo., pp. 224; cloth, $1.00. (Through H. R. Hildreth Printing Co.)—— The Official Correspondence between Surgeon-Gen'l William A. Hammond, U. S. A., and the Adjutant General of the Army, Relative to the Founding of

the Army Medical Museum.———A Case of Melanosis. By Wm. H. Falls, M. D. Cincinnati, O. Reprint from Cincinnati Lancet and Clinic.——— Proceedings of the Eighth Annual Session of the Southern Illinois Medical Association, held at Sparta, Ill., May 9th and 10th, 1883.———How can we Obtain and Preserve the best Eyesight and Hearing? By Leartus Connor, A. M., M. D., Detroit, Mich. Reprint from Annual Report of Michigan State Board of Health for 1882.———A Clinical Study of Syphilis of the Eye and its Appendages. By Leartus Connor, A. M., M. D., of Detroit, Mich. Reprint from the American Journal of Medical Sciences. —Second Annual Announcement and Catalogue of the Woman's Medical College of Baltimore. For the Session 1883-84.———Heart-Puncture and Heart-Suture as Therapeutic Procedures. By John B. Roberts, M. D., of Philadelphia. Reprint from Medical News, Jan. 13, '83.———The Clinical History and Exact Localization of Perinephric Abscesses. By John B. Roberts, M. D., Philadelphia. Reprint from the American Journal of Medical Sciences, April, '82.

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THE APEX BEAT of the heart is stated by Italian investigators to be found in the fourth intercostal space in 67 per cent. of males and 86 per cent. of females, instead of being in the fifth space, as is stated by most of the books.

DISTILLED WATER is said by Paul M. Chapman, M. D., to be not the best vehicle for eye lotions. As the lachrymal secretion is slightly alkaline, distilled water acts as a slight irritant and occasions discomfort and smarting. The addition of two and a half grains of sodium chloride to the ounce of distilled water renders more beneficial any lotion intended to be soothing in character.—*Practitioner*, May, '83.

THE AMERICAN PSYCHOLOGICAL JOURNAL is a new quarterly, issued by the National Association for the Protection of the Insane and the Prevention of Insanity. The editor is Joseph Parrish, M. D., of Burlington, N. J. This journal is not intended for the reading of physicians alone, but aims to discuss the questions that come up with regard to the care of the insane, the rights of the insane, and the prevention from the standpoints of the educator, of the sociologist and legislator, as well as that of the physician. The field is a wide one, and if succeeding numbers shall be as ably prepared as is this first one, the usefulness and success of the journal are assured.

TRANSLATIONS.

ON HEMICRANIA GASTRICA.

BY DR. WM. BRUGELMAN. Extract from the *Berlin Klin Wochenschrift*, by DR. H. W. HERMANN.

The heading of the article already indicates a decided variation from the usual acceptation of the origin of this vague disease. The author recognizes the forms described by Eulenburg and others (*Hemicrania lymphatico-tonica* and *H. angio-paralytica*) but wishes to add a third form, based upon a number of accurately observed cases for which, from the etiology, he has chosen the above name, and which he doubts not originates in a disturbance of the sympathetic in the region of the stomach. (*Plexus coron. ventr. sup.*) He has met these cases in delicate, anemic and hysterical women, but also in robust and otherwise healthy men with an irritable, nervous system, however, and above all, hereditary predisposition. All had dyspeptic symptoms, and some chronic catarrh of the stomach.

In this form of megrim there is neither unusual redness nor remarkable pallor of the face; but the patient looks bad generally. It is difficult for him to keep his eyes open, a dark line is perceived under the eyes, and without exception a strong fetor *ex ore* is noticed. The attack is often preceded by an aura for days, at the same time with anorexia or perverse appetite, salivation, pyrosis and general malaise, with an exaggeration of which the patient awakens on the morning of the attack, after having spent a restless night, in which he frequently drank water, urinated, and perhaps noticed a priapism. Any little discretion in regard to food is liable to bring on the attack during such a time. On the other hand, when the attack is over the patients may indulge freely in eating and drinking without danger of megrim. They feel decidedly best one or two days after the attack—digestion and mental functions are in the best order. Only at the end of the usual interval slight

symptoms of indigestion again make their appearance, which gradually become so oppressive that the patients often wish the attack of megrim to come on only to be relieved of these unpleasant symptoms.

During the attack the picture is the following: After a restless night the patient awakes with a slight pain in a circumscribed spot on the head, slight pains in the muscles of the neck, a feeling of weight in the head, unwillingness to rise, and an unpleasant weariness of the whole body, which finally induces him to get up. In spite of the warmth of the bed the feet and hands feel cold and are covered with a cold prespiration; the nails present a bluish appearance. In the beginning of the attack the condition is generally bearable, and only later on forces the patient to seek his couch. Gradually the symptoms increase; the patient has an uncomfortable feeling of coldness in the stomach, the general expression is that the stomach has stopped working. Then the headache becomes worse and the patient instinctively bends the head backwards, as then the carotids are compressed by the close-fitting shirt collar, which decidedly relieves the pain. Now the patients are unable to go about, the discomfort in the stomach increases, while the scalp becomes burning hot, a chilliness and tremor is felt all over the whole body so that the teeth clatter and appear to have grown longer. Nausea is excessive, a large amount of light-colored urine is passed, and the symptoms increase to an unbearable degree. After vomiting they remit considerably to be soon followed by the former symptoms, which again abate after vomiting; and in that way gradually well-being is again established. At last, toward morning, the patient falls asleep and awakes a few hours afterwards, worn, with painful scalp, coated tongue, but no more cold feeling in the stomach or depressed mind. The urine is now concentrated, contains much sediment and uric acid. Universally a desire for warm drink is evinced, and curiously enough the first thing the patients take in all parts of the country is a cup of tea.

These cases of megrim rarely last less than twenty-four hours. Light attacks may begin in the evening and subside in the morning, but often enough they last twenty-four and even forty-eight hours. The headache goes hand in hand with the feeling of coldness and cramp in the stomach, and the patient can defi-

nitely know by the latter sensations, for a quarter of an hour previously, whether the pains in the head will increase or decrease. Another constant symptom is the falling out of the hair. I have neither met gentlemen nor ladies suffering from hemicrania with good growth of hair.

The treatment may be divided into the constitutional and that of the attack. In hemicrania due to a deranged function of the stomach treatment must be directed to the always present chronic affection of the same. In all cases, as already remarked, I found considerable *fetor ex ore*, or at least a strong tendency to it, in the morning before breakfast, for example. The patients know precisely what articles of food they must avoid. One must abstain from fats, the other from sweetmeats, another from coffee, etc. The treatment of the stomach must be stimulating, by carbonic acid waters or antacid, a little soda bicarb. after every meal, or must retard the excessive mucous secretion by diet such as is practiced at Karlsbad. In short, the treatment must be strictly adapted to each case. The result of treatment is often a very satisfactory one; the attacks become more rare and of less intensity, and in fortunate cases disappear entirely.

The treatment during the attack is the following: When the aura comes on, in the morning generally, the patient must take a glass of warm carbonic acid water, or warm water with a little table salt, to rid the stomach of the excess of mucus. Then the patient must fast, walk about in a cool place, the head uncovered, or in severe cases lie down. If the symptoms increase Dr. B. administers twenty to forty drops tr. thebaicæ in a little water. Soon the patient feels an agreeable warmth, similar to that which one feels after an injection of morphine. Then he must sit down with head bent backward, which always relieves. Then the feeling of coldness in the stomach may subside, also the headache; the feet get warm, and he may be sufficiently recovered to resume ordinary work. In the morning the attack is over. Under no circumstances must he allow himself to take food before he has the certain conviction that the attack is subsiding, which he can anticipate very well.

If the attack runs its course in spite of the short remission after the opium, the patient must lie down. The bed must be warmed beforehand, or a hot warming bottle or a hot compress

soaked in hot chamomile tea applied over the stomach. It must be as hot as he can bear it, at any rate the skin over the epigastrium must be well reddened. At the same time a warming cloth is applied to the feet and an ice bag to the head. As soon as the epigastrium is warmed improvement is felt, sometimes remarkably quickly. Often, however, it must be kept up for several hours and renewed if necessary, while the patient must be kept quiet, for which he generally has great desire. If nausea supervenes, several cups of chamomile tea are given, which generally induces vomiting, but if not, so much the better, as it acts as an antispasmodic and quieting agent. The vomiting momentarily increases the headache unbearably, but soon it abates and most patients pronounce the vomiting their salvation. But it is urged emphatically not to induce this vomiting artificially, as in that case it can not be easily quieted and the patients suffer excruciating pain. Of other remedies little is to be expected. The injection of morphia is to be reserved for the worst cases, as it increases the stomach symptoms and vomiting, and prolongs the attack. Quinine is of benefit in *hemicrania sympathico-tonica*, but not in *h. gastrica*. The same is true with caffein. Climatic cures are of benefit only as far as a general improvement is brought about. Finally, an old remedy is mentioned which often affords some relief. Cognac and salt (4:1) rubbed over the region of the stomach until the skin is reddened, and a warm abdominal bandage, of course with the intention of warming the region.

DR. S. D. GROSS filled the office of President of the American Surgical Association for four years, from its commencement till the Cincinnati meeting last month.

MISSOURI STATE BOARD OF HEALTH.—Governor Crittenden has made the following appointments as members of the State Board of Health, viz.: E. H. Gregory, M. D., W. B. Conery, M. D., and P. D. Yost, M. D. (Eclectic), of St. Louis, — Cox, M. D. (Homeopath) of Springfield, J. C. Hearne, M. D., of Hannibal, H. F. Hereford, M. D., of Kansas City, and G. T. Bartlett, M. D., of Poplar Bluff.

REPORTS ON PROGRESS.

MEDICINE.

Croton-Chloral Mixture.—PROF. LIEBREICH who introduced butyl chloral, less correctly but more commonly called croton-chloral, into medical practice as a remedy in neuralgia of the fifth pair of nerves, and in the headache which affects anemic women, prefers the following formula for its administration:

R.	Croton-Chloral, - -	5 to 10 parts.
	Glycerin, - - -	20 "
	Distilled Water, - -	130 "

M. Teaspoonful doses of the mixture will contain two to four grains of croton-chloral.—*New Remedies*, May, 1883.

Menthol to Relieve Pain.—D. M. CAMMAN has found menthol to be of service in the treatment of facial neuralgia, lumbago, fugitive chest pains of phthisis, intercostal neuralgia, pleurodynia and gastralgia.—*Med. Rec.* Apr. 18, 1883.

The Chlorhydrate of Kairine.—This new medicament, whose true name is methylhydrate of oxyquinolin, is presented under the form of a crytalline yellowish grey powder, soluble in water. The taste is salty, bitter and aromatic. M. Hallopeau has tried this new agent on three pationts and has determined pronounced antithermic effects. In a communication to the Medical Society of the Hospitals (Mar. 1883,) he asserted, although he had tried it in only three cases, that, of all the antipyretic agents, this new agent is the one whose action, in doses not toxic, is most sure, most powerful and most rapid. According to the investigations of Filehne, the action of the kairine appears to be exercised in all diseases. The latter has been able to reduce to a complete apyrexia a frank pneumonia. The Kairine is administered in doses of 30 to 50 centigrams (one-half to three-fourths grain) every hour or hour and a half

in a patient of average strength. After the first dose the temperature is reduced from one-half to two degrees centigrade; after the third it descends to the normal or below. It is necessary, in order that the apyrexia be maintained, to continue the administration of the Kairine in the preceding doses, or in that of a gram (grs. xv.) every two hours, without which the fever ascends rapidly to the degree which it attained previously. This mode of administration necessitates the constant presence of an intelligent assistant and frequent attendance of a physician. This is the one obligation which the use of the medicament in current practice entails.—*Gaz. Med. de Nantes,* May 9, '83.

Acute Rheumatism.—DR. J. M. GRANVILLE advises no local applications except loose cotton-wool covered with light flannel; no oil silk or other vapor-proof material. He prescribes the following:

℞.	Tr. aconiti (P. B.) - -	m. xij.
	Ammonia sulphide, - - -	m. xvj.
	Aq. menth. virid. dest. - -	℥ vj.

M. Sig. One-fourth part every four hours, or in severe cases every three hours. The sulphide of ammonium decomposes very easily, and therefore no more than four doses should be prescribed at one time.—*Brit. Med. Jour.* Apr., 7, '83.

Quinine in Whooping Cough.—W. T. PARKER recommends as the result of personal experience the use in whooping cough of small and frequently repeated doses of quinine, the treatment introduced in New York from Germany, by Dr. Dawson, who used it in the wards of the hospital for children in New York City. Every two hours he gives a teaspoonful of a solution containing four, six, eight, or even ten grains to the ounce. He finds it very reliable in controlling the disease, shortening the paroxyms of coughing, and diminishing both their frequency and violence, and abbreviating materially the course of the disease.—*Med. and Surg. Rep.*, Apr. 21, '83.

A New Remedy for Malarial Fever.—DR. CARLO MAGLIERE speaks very highly of a remedy which has been in popular use in some parts of this country for some time. It is a decoction

of lemons. He had his attention drawn to it while visiting another section of his country, and after experimenting with it was astonished at its beneficial effects in all sorts of malarial fever. He reports some truly remarkable cures effected by it. He recommends the decoction made of the fresh lemon, cut into slices and boiled in a new earthen pot. It is to be given four hours before the fever. He gives the results arrived at with this decoction as follows, and urges further experiments to be made: 1. The decoction of lemons in malarial affections gives results equal to and better than quinine. 2. It is not only active when quinine is active, but even after the latter drug ceases to be active. 3. It is not less active in chronic malarial affections. 4. It does not present any of the disadvantageous effects of quinine. 5. Its administration is possible also in catarrhal conditions of the digestive tract. 6. Its cheapneses rnders it eminently popular.

OBSTETRICS AND GYNECOLOGY.

On Prevention of Laceration of the Female Perineum.—MR. ALEXANDER DUKE remarks, "The best preventive treatment of laceration that I have found (and which I dare not claim as original, though I find no notice of it in the text-books on midwifery) is this: When I find the head fairly engaged in the pelvis, and advancing with each pain, I take my seat by the patient's bedside, and having lubricated my left thumb, or the two first fingers of my right hand, I introduce either into the vagina, and at the onset of a pain draw back the perineum firmly, but gently, towards the coccyx, relaxing the tension gradually as the pain lessens till the next ensues, and so on till I can draw back the perineum with very slight effort. I thus tire out the muscular structure, and produce sufficient relaxation for the head to pass.

"In most cases so treated there is no danger of the perineum, but when the pubic arch is narrow, (which can be easily determined) I take the additional precaution of raising the patient's left hip, and supporting it on a hard pillow, while the shoulders are kept low, fomenting the parts, using inunction

of lard or vaselin, and taking particular care to direct the head forward by pressure, with my left hand below the coccyx, or a finger in the rectum, leaving the perineum untouched. It has always seemed anomalous to me that the perineum should be expected to dilate on such short notice, namely, "the process of extension," while dilatation of the os and cervix occupy such a considerable time, even with the additional help of nature's hydrostatic dilator, viz., the bag of waters.

"The drawing back of the perineum produces no additional pain to the patient, as it is done during a uterine contraction, and I feel sure that if nurses and students were educated as to the proper way of preparing the perineum previous to its distension with the presenting part, we should see and hear less of lacerated perineum."—*Brit. Med. Jour.*

Trachelorrhaphy a Cause of Sterility.—P. J. MURPHY finds only eleven cases in the records of the operation of trachelorrhaphy in which any mention is made of the effect of the operation upon the condition of the patient with reference to fertility and subsequent parturition. He himself adds three cases. From a comparison of these cases he concludes:

1. That repair of lacerations of the cervix uteri is usually followed by sterility.

2. That the character of the labor is unusually severe and protracted, and that, in a large percentage, laceration occurs a second time.

3. That in order to ascertain the benefit of surgical interference in such cases, an examination should be instituted several months after the operation, to determine the condition of the cervical canal, and, if conception has taken place, the condition of the cervix following delivery.—*Am. Jour. of Obst.*, Jan., '83.

With reference to this third conclusion there can be no question, but we think the number of cases reported is not sufficient to warrant either of the others, as is shown by the discussion which took place in the October meeting of the New York Obstetrical Society, reported in the same number of the *Am. Jour. of Obst.*

DR. B. F. BAER read a paper before the Obstetrical Society of Philadelphia, in which he analyzed twenty-seven cases in

which he had himself made the operation. Six of the patients were either widows or had reached or had passed the menopause and therefore are excluded. Of the other twenty-one cases thirteen had been sterile from five to sixteen years previous to the operation. In the other eight pregnancy had occurred within five years but had terminated in abortion in five. In twelve of the twenty-one cases, from one to five abortions had occurred in each since the laceration. He does not think it is true that sterility usually follows as a result of the operation when it is properly made, the os not left too small and immediate union takes place. Most of the cases that have been operated upon were old chronic cases that had been subjected to all sorts of treatment for the relief of the symptoms caused by the lesion, and the operation is not to be held responsible for a sterility that was dependent upon changes effected in the organ itself by the long continuance of an abnormal condition. We have learned of a considerable number of cases here in St. Louis, operated upon by different surgeons here, and afterwards delivered by them of children at full term without any difficulty in the labor referable to the cicatrix, and without any reproduction of the laceration.

Secondary Puerperal Hemorrhage.—This is far less frequent than the primary form. Comparatively few cases are recorded. Dr. Paul F. Mundé related a case that he himself had treated, in which the hemorrhage came on sixteen days after delivery. He believed the cause of the hemorrhage to be a septic endometritis, with a sloughing of the surface of the hyperplastic endometrium. He treated the case by rapidly removing the tampons which had been introduced, clearing out the clots from the cavity of the uterus, injecting hot carbolized water and then a half ounce of tincture of iodine. As a further precaution he introduced a tampon, and gave a hypodermic injection of a syringeful of Squibb's fluid extract of ergot. The patient made a good recovery.—*Arch. of Med.*, Feb., 1883.

Asthma Aggravated by Pregnancy.—W. V. JAKINS reports the case of a young married woman of low stature, fair and of lax fiber, who inherited asthma from her mother. When four months advanced in her second pregnancy she found her asth-

matic symptoms aggravated materially, and at intervals suffered from such severe paroxysms that her life seemed imperiled. Prompt treatment, sometimes in one form sometimes in another, gave her relief in these attacks, until about three weeks before her expected confinement, when the doctor was summoned to her in a paroxysm which resisted every form of treatment that he could devise. Her condition became so critical that he told her friends that the only resort was immediate delivery. The os was open to the size of a quarter dollar, and the head was presenting. On rupturing the membranes there was a slight improvement in the breathing. After the delivery of a dead child with the forceps, she was quickly relieved from her distressing symptoms. Since then has had no severe asthmatic trouble, although she had advanced to the fifth month of her third pregnancy at the time of the report. This adds another to the many cases of asthma caused or aggravated by reflex irritation.—*Austral. Med. Jour.*, Oct. 15, 1882.

THE ASSOCIATION OF MEDICAL EDITORS met in Cleveland on the evening preceding the meeting of the American Medical Association. The meeting was well attended, and the address of the president, Dr. N. S. Davis, of Chicago, and the paper by Dr. H. O. Marcy, of Boston, received close attention. Dr. L. Connor, of Detroit (*Detroit Lancet*), was elected president, and Dr. Jno. V. Shoemaker, of Philadelphia (*Medical Bulletin*), was elected permanent secretary.

ARMY MEDICAL MUSEUM AND MEDICAL AND SURGICAL HISTORY OF THE WAR.—We have received a copy of the official correspondence between Surgeon-General Wm. A. Hammond, (retired) and the Adjutant General of the army, by which it is shown that to Dr. Hammond is due the credit of *inaugurating* the Army Medical Museum, and the Medical and Surgical History of the War, both of which have become so valuable, and which have been so admirably carried on under the direction of the late Surgeon-General, Jos. K. Barnes.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, April 18th, 1883—DR. FORD in the Chair.

EMMET'S OPERATION.

The President called for an expression of the views of Dr. Gregory upon the subject of Emmet's operation for laceration of the cervix uteri.

Dr. Gregory.—My observations are limited. I don't believe it is a matter of any special importance. I don't know any subject that my mind has been so struck and astounded at as this one. I do not know of any subject that it strikes me has exhibited two opposite practices so generally successful. I am old enough to remember when it was the practice to cut the cervix—divide it for several ailments; I remember a physician, who lived here some years ago, who boasted that he had performed this operation, I don't know how many times. And I think his patients were generally relieved; that is the way it appeared in print. I don't think there ever was a more marked innovation than there has been on this subject. I don't know how it appears to others, but it seems to me that there never was a more popular practice than that of cutting the cervix was for several years, and now the practice of sewing it up seems to be quite as popular. The practice has been just reversed; and those who practice the sewing up of the cervix are just as successful to-day as those by whom it was divided. That is the way the report stands. Now, those who have had experience in that direction may be able to explain this, but to one who has only been a looker on and observer, it appears that the practice of dividing the narrow os was as successful some time ago as the practice of closing it now is.

Dr. McPheeters.—But the one operation was performed with a different view from that with which the other is performed.

That operation was performed upon sterile women, and this is for child-bearing women. Isn't that the case?

Dr. Gregory.—This operation was performed on all sorts of women.

Dr. Engelmann.—I should like very much to say a few words to-night on this subject. It is a subject, I think rather unjustly, of joke, and yet, apparently, a very fitting subject. At one time, it is true, operators seemed to run mad in dividing the cervix and again in sewing it up. All operations when they are first inaugurated are overdone, and so it was with division of the cervix; but that operation is certainly still done: it has found its proper sphere, and that is much more limited than was at first supposed. I have not done the operation often—very rarely, in fact—and I don't think it is a difficult operation; the division of the internal and external os, it is a very simple matter; but there are cases I think where it is judicious. When the operation was new it was overdone, no doubt, and because it was done successfully by some, it was supposed that it would be successful in all cases; but cases were not properly selected. This is not the case with that operation at present, because the matter is settled now, it has found its proper sphere, and there is no more talk about it, just as we hear no more talk about the ligation of blood vessels, because we know that it is a settled matter that we should ligate them.

Dr. Gregory.—I alluded to the general practice of dividing the uterine neck as it was practiced fifteen or twenty years ago. I often asked why it was that the external os was so frequently divided. The external os always appeared to me large enough. I could readily understand how it might be of service in a case of anteverted or displaced uterus, in straightening the canal, perhaps making it more perfect by the division. I could understand how in an occasional case of this kind it might be advisable; but I could never understand why this bi-lateral section of the internal os was ever so popular.

Dr. Engelmann.—I think the doctor is right, and I think that is the generally accepted idea at present. There is no more talk about it, because we have come down to the facts. We all know when to do it. The cases are rare. In former times it was not known when to do it, and when physicians found cases of uterine disease, they often divided the os, perhaps very

unnecessarily. With regard to the matter of lacerations and their closure, perhaps the operation is overdone. There may be large lacerations that need no attention, and there are small ones which do need attention. We must again differentiate the cases where the operation is necessary from those where it is not necessary. I judge that in a little while we will hear very little of this operation, because it will become an accepted operation, and we will know when it is necessary and when it is not. In a few years it will be an established fact when we should operate. When we have attempted it in a great many cases where it is unnecessary, and noticed the results, whether the operation was judicious or injudicious, then we can lay down a law, and then we will not hear so much of this operation as we do now.

Dr. G. A. Moses.—The two operations were in reality never advised for the same conditions, except very rarely, and where the operation of the old bi-lateral section was advised by Dr. Sims—which was suggested when we were working in the dark. So far as regards the reflex condition due to uterine irritation, Dr. Sims advised it for certain forms of sterility due to supposed malformation of the cervix, where the cervix was elongated or conoid. I don't think that operation is ever done now—that is to say, the complete division of the cervix bi-laterally. Even at the time that the operation was first advised, when it was first spoken of, I recollect I was very ambitious to find a case to bi-lateralize, and I never did find one. I had a patient on the table and under chloroform for the purpose of doing the operation, and when I got her in that condition I came to the conclusion that it was not necessary. That woman has since been fortunate enough to become pregnant and bear a child. Now so far as the operation for the relief of dysmenorrhea and sterility is concerned, it has been so much modified since it was first suggested that it is no longer the same operation, even in Dr. Sims' hands. So far as regards the contrast between sewing up the lacerated cervix, in contradistinction to the division of the cervix, I never could see why the two were put in juxtaposition. The operation as advised by Emmet was for the purpose of closing a traumatic injury, and for the purpose of protecting from exposure a delicate mucous membrane, to protect the parts from being con-

stantly subjected to the discharges of various kinds, which were irritating to an injury, however slight. The operation was advised for the purpose of protection by getting rid of this raw surface, and, in the second place, by getting rid of the cicatricial tissue and making a perfectly healthy and normal cervix; thus preventing the exposure, and the consequent irritations and nervous conditions that followed the constant inflammation and infiltration accompanying cicatricial formation; so that I do not think these operations should be compared at all. They were not advised to meet similar indications.

Dr. McPheeters.—If I am not mistaken, and I wish the gentlemen would correct me if I am, Dr. Barret in the discussion at the last meeting laid down the law, and stated it as his opinion, that in all cases of laceration this operation should be performed. Well now, sir, I wouldn't like to see that go forth published in the transactions of this society without demurring to it. The os in very many cases of labor is to a greater or less extent lacerated. There can be no doubt of that; sometimes bi-laterally, sometimes uni-laterally. I think that where the laceration is bi-lateral, it is more apt to be deep and extensive and to involve the submucous tissue than where it is uni-lateral, but that it is more apt to heal naturally, from the simple fact that subsequently the uterine contraction will be more uniform, and the parts will be necessarily brought more in apposition. Now, as far as lacerations are concerned, they have taken place from time immemorial. That there are cases of laceration of the cervix which require an operation there can be no doubt. But Emmet himself, in an article that I was reading recently, says that the operation has been performed too often, and that it is time limitations were thrown around it. He has used that expression, and says that simple laceration of the os amounts to nothing, except it is followed by untoward symptoms; these untoward symptoms sometimes do occur, but I believe that in the great majority of cases—in nineteen out of twenty, if not forty out of fifty, cases of laceration, they will heal without an operation. Probably the gentlemen have noticed in some of the statistics Mundé states that in twenty-four hundred cases cases he has examined after child-birth there was a percentage of lacerations of twenty-two; Emmet himself makes it 33⅓, and another gentleman,

whose statistics I do not consider reliable, puts it at forty-five. However this may be, there is no doubt that they do occur, and that they have occurred from time immemorial, and yet this operation is a very recent one; and I am inclined to think, sir, that a great many of the injurious consequences which are attributed to lacerations of the cervix are due to another and far more common and far more injurious cause than lacerated cervix; I mean the nervous symptoms, etc., which we find in so many females of the present day; I believe that they are owing to another cause; I allude to the wicked subterfuges resorted to to prevent conception and to get rid of the products of conception. As I stated before, these lacerations have occurred from time immemorial, and yet it is a well known fact that the women of the past generation—sixty years ago, when this operation was unknown—were at least as healthy and I believe healthier than they now are. There are undoubtedly cases where it is necessary for the well-being of the patient that these lacerations should be relieved by an operation, yet it doesn't follow that every laceration should be operated upon; and after all, it is more the persistent cellulitis that follows and involves the surrounding tissues that renders the operation necessary than anything else, and of course you cannot operate until the pelvic inflammation has been removed. The idea of operating upon a laceration immediately after parturition is to my mind absurd. It is impracticable and repulsive. It seems to me that something can be done to prevent these operations. I believe one of the principal causes of lacerations is the premature rupture of the membranes. What I wish is simply to put in a protest against the idea that all lacerations of the cervix ought to be operated upon. I think that the operation has its place, and that it will take its place regularly and be recognized as an operation to be performed only in certain cases.

Dr. Prewitt.—I must say that this subject struck me somewhat as it did Dr. Gregory. Of course the two operations are not performed for the same conditions, but when a section is made for any condition you have got a divided cervix, just as you have after parturition; and I don't see why, if you have a bilateral section of the cervix for eversion, for a contraction of the canal, or anything of that kind, you may not have precisely

the same conditions following upon it as in a case of divided cervix from parturition. I do not see why there shouldn't be the same results. I recollect distinctly having seen a case of a patient operated on by a gentleman whose name has been mentioned here this evening, die of metro-peritonitis, and I take it that these operations are alway apt to be followed by dangerous or fatal results. But the operation of bilateral section, as has been stated to-night, is not done now. Occasionally the posterior section is done to straighten the canal, etc. We see with these operations that everybody does them, and they operate on all kinds of cases, whether it is necessary or not, until experience demonstrates its usefulness and dangers, and until lives are lost by it. It then settles down, and is recognized as suitable only to a certain class of cases. Then these operations will be performed only when it is proper and right; and then it will not be so much talked about. I am satisfied that this operation has been recklessly done. There are cases that require operation. Take, for instance, cases of laceration of the cervix where the sides of the laceration have turned out and you have the mucous membrane in a diseased condition, rolled over looking like a piece of raw beef; I have no doubt a great deal of nervous disturbance may follow. I have no doubt that we meet with many cases where none of these exist, none of this eversion of the mucous membrane; there is no strain apparently upon the apex of the fisssure as there would be in the other cases. You have in the first case a great eversion of the mucous membrane; you have a very marked strain, a constant irritation of the tissues, that would give rise doubtless to a great deal of reflex nervous disturbance; but in the other cases, where there are minor lacerations, where there is none of this turning out of the mucous membrane, nothing abnormal, except that there has been some laceration, this heals up kindly and looks sound. Still I can not believe that it is necessary to sew up all these lacerations, and unless it can be shown that certain conditions are attributable to this condition, and not attributable to anything else, something definite, clearly defined; something that there can be no mistake about, proving that these symptoms are due to this condition, and that they are relieved by its cure; unless this is done, I cannot believe that this operation is necessary in these slight lacerations of the cervix.

Dr. Engelmann.—In reply to Dr. Prewitt, who I think is perfectly wrong, I will say that I have seen such brilliant successes and such immediate successes from this operation that I am thoroughly convinced of the necessity in some cases of performing it. I have had patients tell me when they left the table that they were different persons; that they had no more back aches; that they were free from the dragging, bearing-down pains, etc. The expression that has been used to me in a number of cases has been: "Doctor, I am a different woman altogether." I have seen ladies who for six or eight months did not leave their rooms and scarcely left their beds for that period, who left the table with expressions of relief and could go traveling in a few weeks—within three weeks; and in one instance, immediately after the operation was done. I have seen three failures which I can now explain which I could not explain formerly. I think the successes in this operation warrant me in saying that there is no other small operation, and hardly a large operation, which can give such brilliant and such immediate and permanent results as this; and it is not a question whether it is a large laceration or not. I have seen large lacerations, such as Dr. Prewitt described, causing no symptoms in the patient. They were slightly troubled, perhaps, and came on account of leucorrhea, without any nervous pains or any great suffering, and I found the lower lip hanging down, and yet all they complained of was the leucorrhea. By sending them home, and using an astringent injection, I relieved them. On the other hand, I have seen small lacerations that caused the most terrible suffering. It is evident that the size of the laceration does not determine the necessity for operation. There is with the laceration something peculiar in the nervous system; there are nerve connections which we do not understand, whether it is the formation of the cicatricial tissue; whether it is the exposure of the nerve endings, or what it is I do not know, but I have positively seen large lacerations, lacerations of a remarkable size, so that the lower lip hung down, causing nothing but leucorrhea, and I have seen small lacerations causing a most distressing train of symptoms, which were relieved after this operation. I have learned to look upon these symptoms, and to so distinguish them, that I can tell from the symptoms with

almost certainty when there is a case of laceration. When you see a patient of this kind and inquire into her history, you will find that she either had a very rapid labor or a very severe labor. Within a month, two, three or four months perhaps, she has noticed her health slowly beginning to fail. The histories of these cases of laceration have something in common, although their symptoms differ. I have had three complete failures. I never do the operation now where there is endometritis, without dividing the internal os and scooping the cavity, because I am sure that in a number of cases the endometritis or metritis still continues, and if this is not relieved, the patient will not be cured; and I am sure that in the instances in which I saw no improvement it was due to this fact. One poor woman, a farmer's wife, came to the city and was operated upon three times to make a perfectly normal cervix, but she was no better; and I am satisfied that the reason was because the endometritis was not cured. This is liable to be the fact in a great many cases; and, although the simple operation for the laceration may cure some of the symptoms, it certainly may not affect the endometritis.

Dr. Gregory.—I would like to ask Dr. Boisliniere if he remembers a case that he saw some two years ago of a very intelligent lady who was suffering from nervous symptoms which I have never seen described in books. A doctor who had been her family physician for years sent for me in consultation, and we attended her in conjunction for some time, and then we both desired that Dr. Boisliniere be called in, and he was associated with us in the case for several weeks. The symptoms of this lady resulted, not from labor, but from an abortion that was brought about by her own act, and this woman had a laceration. Dr. Baumgarten, Dr. Boisliniere and myself attended this woman for some time, and she finally recovered completely. We did not perform this operation for laceration, but simply treated it on general principles, and she is a perfectly healthy woman now.

Dr. G. A. Moses.—If the symptoms resulted from the laceration, and it took a number of months to cure her by a slow, tedious process, might she not have been relieved in a few weeks by the operation? I have had the same experience that Dr. Engelmann has had.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 20, 1883—DR. G. BAUMGARTEN in the Chair.

EXCISION OF THE KNEE JOINT.

Dr. Carson.—I would like to show a case of excision of the knee joint in which the result is an admirable one. The case has been reported in the December number of the COURIER, so that I will simply present the case in order that you may see the result. I also have here a drawing of a case which I operated upon several years ago with a very good result. It was a fearful case, which I reported at the time. I simply present the picture to refer back to the case. I heard of the patient a few weeks ago, and he has been so much improved by the operation that from a useless member of society he has been enabled to learn a trade, and goes about without the aid of a a stick or any support whatever, and is earning a good living. I will say in this case the deformity is owing partly to the quantity of bone removed and partly to the splint. I used in that case a Packard splint. The posterior part is connected by a piece of backing, which corresponds to the joint, connected with the brackets. I took a cut to a pattern maker and told him I wanted it made straight, but he misunderstood me and gave it a slight curve, and as I did not see it until just before the operation it was too late to make any change. As I had no other splint convenient for this case I used it. In this case I used a half round iron, which was bent with the brackets corresponding to the joint, and this was applied by means of plaster of Paris. A straight incision was made across the limb, and the head of the bone excised. In that case a semicircular incision was made from one condyle below the patella around to the opposite side. I prefer this operation, as it opens the joint fully, and also makes a less extensive incision and gives better drainage than the other method. The patient recovered without any bad symptoms, and without a great deal of fever. He has improved also in general appearance. There is about an inch and a half shortening. I removed about two inches of the bone. The disease in this case commenced in the synovial membrane and in the head of the bone. I re-

moved fully an inch of the tibia. Dr. Hardaway asks me if the operation was performed under Listerism. It was not, as far as the spray was concerned. Solutions of carbolic acid were used freely during the operation; and after completing the incisions, and just before replacing the bones in position and the application of the splint, a solution of one to twenty was poured over the cut surfaces—a gallon or more of it—and then the wounded surfaces were brought together and silk sutures introduced, and the Lister dressing applied, but the spray was not used. The sponges, however, were prepared beforehand. These sponges were prepared in the same manner as they are prepared for ovariotomy. For sometime after this operation there was a discharge from this outer opening, but there has been no discharge of bone since the operation. In the other case the patient wore a brace for some time—a year or a year and a half—before the limb became perfectly solid so that he could go without a brace. This is the fourth case that we have had at the hospital. Two of them were exceedingly hopeless cases—the one here and the one that Dr. Gregory operated. In both of these cases the results were far better than we expected. I heard from Dr. Gregory's second case, and the patient was doing very well. He is a farmer, and was able to plow and go about and do his duties about the farm as readily as any man could. From being very delicate and useless he has become stout and healthy. In this other case the boy was fifteen or sixteen years of age when I operated. I removed three and a half or nearly four inches of bone from the articulation, and, as you see, there is very little shortening compared with the amount of tissue removed; and it did not interfere at all with the growth of the limb. It seemed to keep pace with the other. In the case of the patient here to-night, I will say that he walks without crutches, except when he has to make long trips.

CURIOUS NERVOUS AFFECTION.

Dr. Nelson.—I wish to relate a case that has been one of some interest to me. Several times within the last six or eight months I have seen a gentleman, fifty or fifty-five years old, who told me that he had been very much annoyed for some months past by a peculiar sensation in his toes; I think it

is in two toes—perhaps only the great toe of one foot. Whenever he sits for any length of time in a room, and sometimes when he is moving about, he experiences a very painful sensation and positive cramping in the toe, and he has been obliged frequently when he has been in company to withdraw to another room and take off his shoe and remove the stocking, when he could replace the shoe and wear it without trouble. He finds it impossible to wear a stocking either of cotton or woolen material for any length of time, and of course in cold weather that is a matter of considerable inconvenience He does not wear tight boots. He has the feeling himself that this may be the beginning of the approach of paralysis.

Dr. Leete.—There may be something which causes a faulty circulation by reason of which the foot goes to sleep. Some chairs, as you know, are very badly constructed; the pressure comes upon the under side of the leg, and is unbearable—it interferes with the circulation and produces a sleeping condition of the limb. I merely suggest this as a possible cause of the trouble, and in that case it could be relieved by giving the part more room. It might be the result, also, of a varicose condition of ths vessels. Is there any trouble of that kind?

Dr. Nelson.—I believe not.

Dr. Leete.—Sometimes the varicose condition of the veins does not attract attention, it being the deep veins that are affected.

Dr. Hardaway.—There is a condition of the joints of the hands to which I wish to call attention, and some of the gentlemen may remember an article that was published in a Boston journal some years ago which referred to this condition. I have seen it myself, most frequently in women, in which, particularly in the morning, without any apparent cause there is a marked stiffness of all the joints of the hands, with considerable swelling—the swelling is more a subjective sensation than an objective. The patient feels as if the skin were too small, especially about the joints. I have noticed it particularly in one case: a patient in fairly good health, without any appreciable cause, without great use of the hand of any sort, would have this swelling and stiffness of the joints; it occurred sometimes for a good many mornings in succession, and

then disappeared; it would return in a week or a month. As the trouble affects the joints of the fingers, we might reasonably suppose that it was a condition which resulted from great use of the hand in hard labor, but in the cases recorded this was not the case.

Dr. Shaw.—I would like to inquire if the patient complained of pain in the back?

Dr. Nelson.—No, sir.

Dr. Shaw.—The reason I asked the question is because I know this party, and have known him for some years, and he is a tubercular subject. It was supposed some twenty years ago that he was in the last stages of consumption, and we do have these pains in the extremities quite frequently where there is tubercular trouble of the spinal cord, which gives rise to irritation of the sensory nerves. I would suggest from the history of the patient that possibly that might be the cause.

NEBRASKA STATE MEDICAL SOCIETY.

The fifteenth annual session of the Nebraska State Medical Society was held in the chamber of the House of Representatives in the city of Lincoln, Neb., May 22 to 24. At the evening session of the first day, the Committee on Credentials reported, and thirty-two gentlemen were elected as permanent members.

Dr. Donald Macrae, of Council Bluffs, Iowa, was elected a member on account of his connection with the Omaha Medical College of this state.

Lincoln Medical Society presented an invitation to the state society to attend a reception in the Senate Chamber, followed by a banquet at the American Hotel. This invitation was accepted, and a vote of thanks was tendered for the invitation.

Dr. Chas. S. Hart was elected assistant secretary.

After the reading of the secretary's report, the society adjourned until 9 A. M. Wednesday morning. At that time the Committee of Arrangements reported that the Mayor of the city would deliver the address of welcome at 2 P. M.

Dr. F. A. Simmons, president of the N. W. Medical College, of St. Joseph, Mo., was made a member by invitation, also Dr. G. W. Ross, of Bluff Dale, Ill.

Dr. Mansfelde read a paper upon "The Pathology and Histology of the Kidney, with especial reference to Cystic Degeneration"—with specimen weighing four and a half pounds. This was followed by a very interestiug discussion.

Dr. H. P. Mathewson presented an invitation to the members of the society to visit at 3 P. M. the Hospital for the Insane, of which he is the superintendent. He also stated that he would furnish conveyances. Dr. Robbins presented an invitation from the managers of the Home of the Friendless to visit that institution. Accepted.

There was then some discussion upon the subject of Hysteria, by Drs. Mansfelde, Simmons, Carter, Hoover, Incher, Muir, Coffman, Mercer and Mathewson.

Dr. J. F. Millspaugh, of Battle Creek, Mich., was elected a member by invitation.

At 2 P. M. the society assembled to hear the address of welcome by the Mayor of the city of Lincoln, Hon. R. E. Moore.

The report of the chairman of the Committee of Ways and Means was then received.

A motion to suspend the rules and elect officers at an evening session was carried.

Adjourning at 3 P. M., in order to accept the invitations referred to above, the members of the society found carriages awaiting them at the door, and visited the Home of the Friendless, Penitentiary and the Asylum. A very pleasant afternoon was closed with a reception given by Dr. Mathewson at the Asylum for the Insane.

At the evening session a resolution offered by Dr. Macrae was adopted, expressing a hearty appreciation of the hospitality extended to the association by Dr. Mathewson, and commending his management of the Insane Asylum and the appearance of the institution and its inmates.

A resolution was passed to the effect that the action of the society last year, with regard to the Northwestern Medical College of St. Joseph, was not for the purpose of condemning said college, but for the suppression of recognition of the same until our acquaintance with its operations should be sufficient to warrant such recognition.

The election of officers resulted as follows: President, V. H. Coffman, of Omaha; 1st Vice-President, G. W. John-

ston, of Fairmount; 2d Vice-President, E. Van Buren, of Hooper; Treasurer, R. C. Moore, of Omaha; Recording Sec'y, R. R. Livingston, of Plattsmouth.

May 24th, 9 A. M. To the American Medical Association the following delegates were selected: Drs. Dayton, Stone, Moore, Mercer, V. H. Coffman, Graddy, Britenstein, Fuller, Pebbles, Larsh, Whitten, Donaldson, Robbins, Livingston, Swetnam, Anderson, A. R. Mitchell. To the Minnesota State Society: Dr. Geo. B. Ayers, of Omaha. To Iowa State Society: Drs. Mansfelde, Sowers and Coffman.

An amendment to constitution, to make the office of recording secretary a permanent one, was laid over.

A motion for a Committee of Five to revise the constitution was carried. The following were appointed the committee, viz: Drs. Mercer, Mansfelde, Hart, Sowers and J. O. Carter.

A motion to meet next year on the second Tuesday in May was carried, and Omaha chosen as the place for holding next annual session.

Dr. Anderson read a paper on "A Case of Poisoning by Tincture of Aconite," followed by an interesting discussion.

Amendments to the constitution were laid over, to be acted upon at the next annual session, adopting "Roberts' Rules of Order" as the standard, and providing for a definite printed programme for papers and exercises.

The Publication Committee were instructed to proceed to publish Transactions in one month after this meeting.

A paper by Dr. Chapin, of Lincoln, upon the "History of Vaccination in America," was followed by a discussion.

A vote of thanks was tendered to the present president for the efficient and impartial manner in which he has presided over this meeting; to Dr. C. S. Hart, the efficient and active assistant secretary; and to the B. & M. and U. P. Railroads for courtesies extended this society.

Installation of officers then took place—Drs. Link and Stone officiating as Committee of Introduction.

Dr. Coffman, president elect, made some very appropriate remarks.

The retiring president then delivered an address.

The president elect appointed the following committees for the ensuing year:

1. Committee of Arrangements—Drs. Swetnam, Leisering and Moore.
2. Surgery—Drs. Livingston, Larsh and Hart.
3. Pract. of Med.—Drs. Dildine, Prof. Carter and Donaldson.
4. Materia Medica—Drs. Cooke, Lynn and Moore.
5. Obstetrics—Drs. Robbins, Whitten and Macrae.
6. Forensic Medicine—Drs. Abbott, Fuller and Knapp.
7. Anatomy and Physiology—Drs. Ayres, A. R. Mitchell and Gibbs.
8. Climatology—Drs. Chapin, Sowers and White.
9. Mental Diseases—Drs. Merriam, Mathewson and Incher.
10. Ways and Means—Drs. Pebbles, Gahan and Ackley.
11. Otology and Ophthalmology—Drs. Denise, Graddy and Dayton.
12. Necrology—Drs. Peabody, Hewitt and J. O. Carter.
13. Grievances—Drs. Mercer, Stone and Martyn.

A paper was then read by Dr. Mansfelde, upon "Therapeutic Addenda—Listerism, Diphtheria, Asthma, Pilocarpin," followed by a lengthy and very interesting discussion.

A paper by Dr. Henry, upon "Cystitis," was followed by discussion.

A motion was then passed to refer to Committee on Publication all papers which time and absence of readers prevent being brought up.

The president appointed a special committee, consisting of Drs. Abbott, Merriam and Lowry, to report upon the progress in the treatment of diphtheria, at the next annual session.

A motion to adjourn was then carried.

AMERICAN MEDICAL ASSOCIATION.

The thirty-fourth annual meeting of the American Medical Association was held at Cleveland the first week of last month, with over 1200 registered members, a larger attendance than at any previous meeting except that of 1880 in New York City. This large attendance was probably due in part to the agitation of the question of sustaining or modifying the old code of ethics and in part to the fact that the Ohio State Medical Association which, was then in session in Cleveland, was received and reg-

istered en masse, thus adding three hundred names to the roll of the American Medical Association. Great harmony of opinion seemed to prevail with regard to the policy to be adopted in regard to the code of ethics. Some little dissatisfaction was expressed at the enforcement of the old rule of the Association requiring a recognition of the code as a preliminary to registration; but this was due rather to the natural objection of American citizens to signing any sort of a pledge than to any dissent from the code itself, as was manifest when Dr. Pollak, of St. Louis, introduced the resolution on behalf of the St. Louis Medical Society, requesting that a committee of one from each state be appointed to revise the code of ethics and report in 1884. A motion was immediately made, seconded by more than a hundred voices, and carried by a large majority, amidst great applause, that this resolution be laid upon the table.

We give in full the preamble and resolution offered by Dr. Pollak, in the expectation that after lying upon the table for one year they will come up for discussion before the Association at the meeting in Washington. It is well that all should know exactly what was proposed by the resolution and have an intelligent opinion for or against it. The following are the preamble and resolution as offered:

"A code of ethics is considered essential for such an organization as the American Medical Association, and is equal in importance to the written law of a community. Associations and communities can only be ruled by laws which are made for themselves and by themselves. But the best laws become oppressive and inoperative when the conditions change which called for their enactment.

A revision and change of such laws becomes then imperative, as is so frequently instanced by the changes of the Constitution of the United States, and of that of every State in the Union. Municipal and corporation charters are changed by the will of the government, which delegates that power to the representatives.

The code of ethics has an existence coeval with the organization of the American Medical Association. It was absolutely necessary then, and it cannot be entirely dispensed with now. But in thirty-four years this country has presented so many phases in its development and progress that new laws are being

constantly enacted, and old laws are repealed or modified to suit the requirements of the time.

The code has accomplished all it was designed it should, but at present many of its features are obsolete, and not adapted to our wants. The necessity of an early revision is very apparent, is loudly called for in all parts of our land, and can not be repressed much longer. The American Medical Association alone has the right and the power to order a revision; all other medical organizations in affiliation with it can only respectfully ask for it. The time has come when the loud and very soon universal call should be heeded. The excitement and the evil consequences of a schism can be easily averted now, and harmony and fraternal feeling may once more be restored among the members of the medical profession. Therefore

Resolved, First, That the American Medical Association be respectfully requested to appoint a committee of one member from each state for the purpose of taking into consideration the propriety and advisability of a revision of the code of ethics, and to report thereon at the meeting of 1884.

Second, That the committee be authorized to prepare a code of ethics which in their view will meet the wishes of the profession, and submit the same to the meeting of 1884."

Great dissatisfaction was felt and expressed at the utter lack of efficient action on the part of the Committee of Arrangements. Local dissensions and personal controversies between members of the profession in Cleveland resulted in the formation of a more inefficient committee of arrangements than has been the misfortune of the Association for many years. The committee was a large one and contained many very estimable gentlemen who were ready and eager to do all in their power to facilitate the work of the Association. Unfortunately, however, a chairman had been selected who seemed to lack the qualifications essential for the successful discharge of the onerous and responsible duties of the position, unless muscular power be deemed an essential qualification, which has not generally been considered the case. Cleveland should have sufficient hotel and boarding house accommodation for a large convention, but when many of the delegates arrived they found the hotels full, the clerks indifferent, no committee at hand to give directions or advice, and were obliged to search through the

city to find lodgings. This and many other inconveniences and annoyances could have been easily avoided had the committee of arrangements been harmonious in their action and under efficient leadership.

The attendance at the meetings of the sections was very good. The papers read were about of the usual character, some excellent, some good, and some exceedingly trashy. Some reform must be made in regard to the manner of presenting papers. Time is taken up by the reading of papers before the American Medical Association sections that are utterly unworthy of attention. We trust that one important effect of the establishment of the new Association Journal will be to call out a better class of papers and a greater amount of original work than has ever been done in the Association before. The definite determination to undertake the publication of the Association Journal was probably the most important business transacted at this meeting.

The report of the Board of Trustees appointed last year was given by the chairman, Dr. N. S. Davis. He stated that in response to the forty thousand circulars sent out they had received two thousand one hundred and fifty responses with twenty-five hundred pledges of support, either by prompt payment of annual dues or by subscription. It was shown that this promises an income of $12,500 from subscriptions, and it was thought that it would be safe to estimate an income of $5,000 additional from advertisers. The following resolution with reference to advertisements was adopted by the Trustees and ratified by the Association: "Through his clerks he [the editor] should solicit advertisements from all medical educational institutions and hospitals open for clinical instruction, book publishers, pharmaceutists, instrument makers, and all other legitimate business interests; but all advertisements of proprietary, trade-mark, copyright, or patented medicines should be excluded. Neither should any advertisement be admitted with one or more names of members of the profession as endorsers, having their official titles or positions attached."

After the adoption of the report of the Board of Trustees, which included the announcement of the election by the Board of Dr. N. S. Davis, of Chicago, as editor of the Association Journal, and of the award of the publication to A. D. Newell &

Co., of Chicago, Dr. Davis made a short address to the Association with reference to the prospects of the journal.

The Address in Medicine was then delivered by the chairman of the section on Practice of Medicine, Dr. J. H. Hollister, of Illinois.

Dr. Gunn, of Wisconsin, then read the Address on Obstetrics and Diseases of Women, which had been prepared by the chairman of that section, Dr. J. K. Bartlett, of Wisconsin, but which he was unable to read himself on account of impairment of his voice.

Thursday, June 7th, a resolution was adopted, providing for the appointment of one or more members from each state as a committee whose duty it shall be to secure, if possible, the enactment, in their respective states, of more stringent laws on the subject of the sale of poisons.

An amendment to the By-laws proposed last year, was called np and passed, by which the selection of the place for meeting will hereafter be left to the committee on nominations.

Next year the place of meeting will be Washington, D. C., and the officers are the following: President, Austin Flint, Sr., M. D., of New York; Vice-Presidents, R. A. Kinloch, M. D., of Charleston. S. C., T. B. Lester, M. D., of Kansas City, Mo.; A. L. Gihon, M. D., U. S. Navy, and S. C. Gordon, M. D., of Portland, Me.; Treasurer, R. J. Dunglison, M. D., of Philadelphia; Librarian, C. H. A. Kleinschmidt, M. D., of Washington, D. C.; Chairman of Committee of Arrangements, A. Y. P. Garnett, M. D., of Washington, D. C.; Chairmen of Sections: Practice of Medicine, J. V. Shoemaker, M. D., Philadelphia; Obstetrics, T. A. Reamy, M. D., Cincinnati, O.; Surgery, C. T. Parks, M. D.. Chicago, Ill.; State Medicine, D. J. Roberts, M. D., Tennessee; Oral Surgery, T. W. Brophy, M. D., Illinois; Ophthalmology, Otology, and Laryngology, J. J. Chisholm, M. D., Baltimore, Md., Diseases of Children, Wm. Lee, M. D., Indiana.

The election of Dr. Flint to the presidency at this time was an exceptional honor. In accordance with long established usage the place should have been assigned to a Southern or Western man, but the stand which Dr. Flint has taken in support of the code of ethics, and in opposition to those who desire to abrogate it, in addition to his eminent professional ability, made him the unanimous choice of the delegates.

The social hours of the Association were thoroughly enjoyed, if we may judge from the throngs who visited the hospitable mansions which were thrown open to the delegates. A promenade concert at the Opera-House on Tuesday, eight receptions on Wednesday, and ten on Thursday served to lighten the evening hours. The effect of the prohibition movement was apparent, and the delegates were not tempted to any indiscretion in the use of wine or other intoxicating beverages at any of the houses where entertainment was offered them.

GRAND RIVER MEDICAL SOCIETY.

The Grand River Medical Society convened in Chillicothe, Mo., June 5th, and continued in session until Wednesday evening, June 6th, when it adjourned to meet in Hamilton, Mo., on the first Tuesday in December.

The meeting was an interesting and profitable one, and about forty members were in attendance.

The following officers were elected for the ensuing year: President, Dr. A. L. McCorkle, Carrollton, Mo.; First Vice-President, Dr. S. M. Beeman, Chillicothe, Mo.; Second Vice-President, Dr. S. T. Howell, Jameson, Mo.; Secretary and Treasurer, Dr. W. T. Lindley, Hamilton, Mo.; Assistant Secretary, Dr. A. H. Vandivert, Bethany, Mo.; Curator, Dr. B. H. Stevens, Chillicothe, Mo.

The following named physicians were received into membership: Dr. J. L. Shipley, Ravanna, Mo.; Dr. A. H. Vandivert, Bethany, Mo.; Dr. E. Van Note, Hamilton, Mo.; Dr. B. N. Bond, Stanberry, Mo.; Dr. J. Z. Barnett, Chillicothe, Mo.; Dr. E. L. Donohew, Proctorville, Mo.; Dr. Calvin Rhea, Chillicothe, Mo.

The following papers were read and discussed: "Use of Argentum Nitratis in Trachoma," by Dr. W. C. Tyre, of Kansas City; "Blood-letting," by Dr. L. Tull, of Carrollton, Mo.; "Typhoid Fever," by Dr. A. L. McCorkle, of Carrollton, Mo.; "Carcinoma of the Liver," by Dr. W. H. Greene, of Mooresville, Mo.; report of a case of "Chronic Bright's Disease," with specimens, by Dr. Tinsley Brown, of Hamilton, Mo. Dr. Lewis, of Kansas City, reported a case of "Carcinoma of the Liver;" also

two cases of gangrene, one of idiopathic and the other of traumatic origin. There were a number of verbal reports of cases by different members of the Society.

AMERICAN SURGICAL ASSOCIATION.

The fourth annual session of the American Surgical Association was held in Cincinnati, May 31 and June 1 and 2, 1883. The Association was called to order at 10 A. M. by the president, Dr. S. D. Gross, who delivered a brief address and was followed by Dr. P. S. Conner, chairman of fhe local committee, in a few words of cordial welcome.

The report of the treasurer, Dr. John H. Packard, of Philadelphia, showed a deposit to the credit of the Association of $2,270.31.

The first paper read before the Association was that of Dr. C. B. Nancrede, of Philadelphia, on the subject, "Have we any Therapeutic Means, as Proven by Experiment, which directly Affect the Local Processes of Inflammation?" At the close of the paper the author summarized his views thus:

1. During the stage of dilated arteries with increased rapidity of current, little danger of capillary changes need be apprehended. Here ergot, and perhaps arterial sedatives are useful.
2. After stasis, weakening of the heart's action can do nothing.
3. The object desired is a removal of obstruction, diminution of force, increase of rapidity.
4. Arterial sedatives in the later stages are usually inadmissible except as succedanea of blood-letting.

This paper called forth quite an animated discussion.

This was followed by the reading of a paper by Dr. B. A. Watson, of Jersey City, N. J., entitled "Lister's System of Aseptic Wound Treatment versus its Modifications," taking the ground emphatically that the treatment advised by Mr. Lister is better than any of the modifications that have been proposed.

In the afternoon Dr. Packard, of Philadelphia, reported a case

of reamputation at the hip-joint for osteo-myelitis, in which it became necessary on the sixth day to ligate the common iliac artery on account of hemorrhage which was not controlled by pressure upon the external iliac at the pelvic brim. He also presented a table of all the reported cases of ligation of the common iliac which had not previously been published in tables.

Dr. Richardson, of New Orleans, read a paper on "Esmarch's Bandage applied to Traumatic Aneurism," and another on "The Use of the Trephine in Traumatic Empyema associated with Thoracic Fistula."

In the morning of the second day, after some routine business, Dr. S. D. Gross read a paper on "The Value of Early and Late Operations in Surgery." Taking the ground that malignant disease is of local origin, he advocated early operations for the removal of morbid growths. He says: "In all operations undertaken for the removal of neoplasms of whatever nature, the golden rule is to perform the work as thoroughly as possible. If this cannot be done, it is better in many cases, if indeed not in all, not to meddle with the growth at all, as such interference often only tends to light up increased activity, not only in the abnormal structures themselves, but in the surrounding ones." He advocated early extirpation of carcinomata where accessible; regarded sarcomata of all sorts, as a rule, dangerous formations, however early operated upon. Any rapidly growing tumor he regards as a bad subject for successful surgical interference. Even benign growths of rapid growth cannot be extirpated too soon, in Dr. Gross' opinion. He advocated removal of cystic tumors of the ovary while they are of small size. In regard to this Dr. Gregory, of St. Louis differed from him, expressing in the discussion of Dr. Gross' paper a decided preference for the late operation for ovarian tumors.

Dr. Basil Norris, U. S. A., read a paper on "Dislocations of the Astragalus," which he thought were often overlooked and treated as "simple sprained ankles." This paper was followed by one on "Excisions of the Tarsus," by Dr. P. S. Conner, of Cincinnati. In concluding his review of the subject Dr. Conner expressed the opinion that the view generally held, viz: that extensive tarsal disease necessitates amputation, is one that requires and should have reconsideration. The president

complimented the writer by saying that it was so comprehensive and concise that there was scarcely room for discussion.

Dr. S. Marks, of Milwaukee, then read a report of a case in which he had trephined the sternum for the removal of a bullet which had penetrated the bone six years before.

At the afternoon session Dr. E. M. Moore, of Rochester, presented a paper discussing "Some Questions with reference to Intra-Capsular Fracture of the Femur," and this was followed by Dr. Senn, of Milwaukee, with a paper on "Fracture of the Neck of the Femur, with special reference to Bony Union after Intra-Capsular Fracture." This latter paper contained the results of an extended series of experiments and investigations by the author. The experiments were made upon small animals, generally cats. He presented a number of specimens taken from cats, and also a specimen from a human subject, from which he drew the conclusion that bony union is obtained in intra-capsular fracture of the femur.

The evening hours were given to a banquet.

Saturday morning Dr. S. W. Gross, of Philadelphia, made a report of a "Case of Nephrectomy for Medullary Cancer and Partial Choleocystectomy for Calculus in the same Subject." Dr. J. E. Mears, of Philadelphia, next read a paper on "Chronic or Permanent Closure of the Jaws and its Treatment." This paper called forth quite an animated discussion, in which a number of the members took part. The paper of Dr. Vanderveer, of Albany, N. Y., consisted of a report of several cases of "Removal of Meckel's Ganglion for the Relief of Trifacial Neuralgia."

The following officers were elected for the coming year: President, E. M. Moore, M. D., of Rochester, N. Y.; First Vice-President, W. W. Dawson, M. D., of Cincinnati, O.; Second Vice-President, C. H. Mastin, M. D., of Mobile, Ala.; Secretary, J. R. Weist, M. D., of Indiana; Treasurer, John H. Packard, M. D., of Philadelphia; Recorder, J. Ewing Mears, M. D., of Philadelphia, Pa.; Member of Council, P. S. Conner, M. D., of Cincinnati.

FOREIGN CORRESPONDENCE.

CONTINENTAL LETTER.

PARIS HOSPITALS—FISTULA IN ANO—NECROSIS OF TIBIA. LYONS HOSPITALS—GENU VALGUM—HEALTH RESORTS. HOSPITAL AT GENOA—NAPLES AND OTHER PLACES IN ITALY—ROME. NATIONAL EXPOSITION OF FRENCH ARTISTS — AMERICAN ARTISTS— A ST. LOUIS ARTIST.

While there are not now professional men in Paris who shine pre-eminently as did those of the last generation, yet there are many laboring hard and doing honest good work. I only had time to visit Gosselin at the Charité, and Verneuil at the Hôpital Pitié. The former, after taking his students through the wards, delivered—sitting—in the amphitheater, an instructive lecture on the most important cases they had seen. He afterwards, performed an operation for anal fistula complete. A thread having been passed through the fistula was attached to the end of the chain of an écraseur, which was drawn through, and by it, under chloroform, the overlying tissue slowly cut or crushed. The open wound, stuffed with scraped lint, was expected to heal from the bottom. When through with the in-department, Gosselin attended to the out-door surgical cases. He freely employs the actual cautery in joint diseases and spinal troubles, the use of which seems barbarous, but its use is not attended with great pain, and remarkable results are claimed from its employment.

Verneuil, after conducting the students through the wards, proceeded to the ampitheater, and at once performed an operation for necrosis of the tibia. The preliminary incisions through the soft parts down to the bone were made with Pacquelin's cautery, the Esmarch bandage having previously been

applied. The trephine and gouge were freely used to obtain access to the interior or medullary portion of the bone, where, as had been surmised, sequestra were found. These were removed, and the wound stuffed and otherwise treated with antiseptic dressing. The case was brilliant in diagnosis and in successful operative interference.

The two hospitals visited are old and badly ventilated, though more attention is now given to hygiene than formerly, and thus there is less erysipelas and pyemia. Doubtless the new Hôtel-Dieu is more what a hospital should be. On my return to Paris I shall hope to visit it and see Richet, also Trelat at Hôpital Necker, also Charcot at la Salpêtrière. Visiting hours are earlier than with us, being tous les jours de 8 heures à 10 heures du matin.

At Lyons I was warmly received by MM. Mollière, Robin and Delore. All had done original work in the matter of genu valgum or knock-knee, and I was anxious to learn more of their investigations and treatment. Delore is more especially interested in and is teaching obstetrics and gynecology, but several years since he investigated the subject of in-knee, and proposed as a method of treatment fracture through the epiphyseal junction both of the femur and tibia. This is done by manual force over the edge of the table. The limb being thus straightened is put up in starch or plaster of Paris dressing, and the patient allowed to be up and about; union occurs in an improved position. He reports cases thus treated and cured. But I do not find that his professional brethren are very generally adopting this method, many preferring in the young subject to employ mechanical appliances worn for a long period, and thus gradually straightening the limb. In the youth and young adult, M. Robin breaks the femur above the epiphyseal junction with an osteoclast of his own devising. M. Mollière, surgeon-in-chief of the Hôtel-Dieu, has in many cases adopted this method very satisfactorily. He showed me in his wards several cases that had undergone the operation, some still in the starch dressing, and others with it removed, all doing well and with no untoward results. At his kindly suggestion M. Robin applied his instrument to the limb of a cadaver in order to illustrate to me its action. It was an adult

subject, and the femur was broken very readily with his osteoclast just above the condyles. On cutting down upon the part the periosteum was not, at least on the anterior part of the femur, broken, though the bone was fractured entirely through. In badly united fractures, and in anchylosis of the knee and hip-joints, the same instrument has been used by them to break up the part and allow of improved reposition.

The Hôtel-Dieu, an imposing building on the quay overlooking the Rhone, is a large general hospital. The surgeon-major, M. Mollière, showed me many interesting cases. Since the adoption of Listerism pyemia and erysipelas are unknown, though previously they were common in the wards. On the opposite side of the same river, on the quai Claude Bernard, is the institution Faculté de Médicine, very extensive and very complete in all its appointments—I should judge destined to become one of the finest schools on the continent. I was surprised at its grandeur and its perfectness. Though occupied, it is not yet completed; it was commenced some five or six years ago.

The famous health resorts in Southern France, Nice, Mentone, S. Remo, are deserving of all that has been said in their praise, all being situated on the beautiful Mediterranean, and, the two latter especially, being protected from the north winds by high mountains. If it were not mild the palm trees would not grow as they do the year round. Each year finds greater numbers, especially from Russia and northern Europe, flocking to this region of ethereal mildness, for pleasure and health. I hear of many consumptives benefited. At Genoa I was greatly pleased with a visit to the new hospital, not yet quite ready for occupancy. The building, with its furnishing and adornment, is the work of a benevolent Italian lady: $4,000,000 is to be expended upon it, and each bed will at once be endowed with 1,000 francs. It is well located on the high ground overlooking the sea. The main building is in the form of an arc, with seven ells or wings running back from its convexity. One of these will be exclusively for private patients, and one contains the chapel, etc. In all its appointments, and it contains all the modern improvements that have been suggested, it is the most complete I have seen, and possibly that the world contains.

At Naples I did not, though I had so intended, visit the hospitals, but I can readily understand why it and the romantically situated towns lining its charming blue bay should be the resort of health and pleasure seekers. A boat sail from Naples to the lovely isle of Capri, with its rocky heights and blue grotto, a carriage ride along the bluffy shore of the bay from Sorrento to Castellamare, a half-day among the ruins of Pompeii, containing objects fashioned several hundred years before the time of Christ, a climb to the crater of Vesuvius 4,000 feet above the sea, affording superb views of the surrounding country and such an experience in beholding the volcano itself, straining, smoking, violently erupting, throwing up in hot masses, large and small, twenty to fifty feet high, the sounds of hissing and explosion to be heard within, the imagination readily conceiving the ebullition and seething going on, the sulphurous fumes and the many tinted sulphurous crusts lying about, all together afford probably one of the most grand and awful experiences that one can have on this earth. All these things together engaged a few of the most pleasan days I ever passed. I say, I can understand why this region, with its mild climate, grand attractions of land and sea, and the additional interest of monuments of races of men historic and long since passed away, and the many peculiarities of the present inhabitants, should have become the resort, not of the healthy pleasure seeker only, but also of the invalid—and I hear of cases greatly benefited and cured by sojourn here.

Rome is well paved, watered and sewered; there is less fever and general sickness than formerly—due to the general sanitary improvements instituted, though there is much yet to be done before it is perfect, for many of the streets are narrow, and the people have careless habits; garbage and offal meet the eye, and multiplied foul odors greet the smell. The season now, the last of May, is about over; as the days are already becoming hot and oppressive, and as the fever has already made its appearance, though moderately, the visitors are departing for cooler and more salubrious regions. Portions of the city have been rebuilt, and are so modern that one dwelling within would not realize that he was in Rome, thus there is the

new as well as the old city. The authorities are preserving with great care the ruins and other remains of antiquity, observing how the world comes to worship and study, and realizing that if conserved they will for years to come "draw," and thus be a source of revenue to the city; and it is well, for they are grand—to the antiquarian or the pleasure seeker. As one visits city after city in the old world he is reminded of the line, "And still the wonder grew."

The people of France and Italy are not as nice and refined as those of America or England. We see many things here to shock and disgust, and we hope and expect that our own country will never become lost to what some would designate true decency.

The "acute" sensation in Paris while I was there was the opening of the National Exposition of French Artists—slightly misleading in name, for it is open to competition by artists from all nations. There are exhibited in the *Salon* 2,886 works in oil, besides many drawings in water and crayon; also a fine showing of statuary in marble, plaster of Paris and bronze. The French speak of the exhibition as one of the finest ever held. The United States has the largest exhibit of all the foreign (to France) nations, and it is one quite creditable to this junior competitor. Of the sixty-four Americans admitted six are from Missouri: Barnsley, Chambers, Hull, Barse, Beckwith and Will Chase. The first three of St. Louis, the last two now of New York. When we know that 4,000 works were rejected, we may realize that it is something of an honor to be hung in the Salon. It must be further known that those who in former years have received medals are called "exempt," i. e., exempt from examination by the jury. Their pictures *must be* admitted. Excluding that large class, it leaves but about 1,000 new men accepted. One then only received out of every five shows how great the honor. Some of your readers are acquainted with and will remember a young St. Louis artist, James Barnsley, he having done anatomical and other drawings for members of the profession. Specimens of his works are to seen in some of the back numbers of the COURIER. He is but twenty-two years old, had been in Paris but three months, during which time he painted (24x40) a view on the

Seine, quai St. Bernard, near the Bastile. It represents a gray day, subdued in tone, workmen unloading huge wine-casks from boats, ascending smoke, city in the distance, etc., altogether making a very pleasing picture, and commendable, at least so considered by the committee, who gave it a place in the Salon. Mr. Ives justly feels proud of his young pupil, the first of the St. Louis Art School to be hung in the French Exposition. If the future does not disappoint the indications of the present, further artistic honor will be done St. Louis by one of her rising sons.

The American artists complain that this year they are not well hung in the Salon, attributable, they think, to the ill-feeling on the part of the French engendered by the high tariff placed by the recent law on works of foreign artists imported into the States. America was the chief market for the French works, many of which will now be excluded. It is hinted that our government retaliated in this way on France, which excluded our salt meats from entrance and sale among its people. Doubtless the objectionable tax on art work will soon be done away. And will not the time come in a near future when there will be free trade and equal exchange of all commodities among all nations of the earth?

A. J. STEELE.

LONDON LETTER.

MEDICAL LEGISLATION.—HOSPITAL FINANCE.—MUSEUM OF HYGIENE. — ARMY MEDICAL DEPARTMENT. — SOCIAL POSITION OF PHYSICIANS.—WOMEN ON HORSEBACK.

LONDON, June, 1883.

The subject which most agitates medical circles in England at the present moment is the new bill brought into Parliament by the government to regulate the education and position of the medical profession. The time of Parliament has been so frittered away with other subjects that very possibly the Medical Bill will have to be dropped. It is high time that some-

thing was done to diminish the number of licensing bodies which now compete with each other in granting diplomas to practice; and to prevent the assumption of false titles. The bill is not viewed with favor by medical corporations, as it will deprive them to a great extent of their licensing powers; but the profession at large is anxious that the bill shall pass. Another subject which has been largely discussed by the medical and lay papers is the financial position of our hospitals, especially the hospitals of the metropolis. The funds have been falling off and the expenses vastly increasing; in fact, it is feared that several of the general hospitals will have to close some of their wards. One of the causes of the reduced subscriptions is the multiplication of small hospitals which has taken place during the last few years. The money is therefore more widely dispersed, and many of the subscribers to the older hospitals have now transferred their support to the new special hospitals; and one of the chief items in the increased expense is that due to the nursing departments. In many hospitals the expense of nursing the patients is nearly doubled, and it is questionable whether it is accompanied with a proportionate increase in efficiency.

A most interesting incident at the latter end of last month (May) was the re-opening of the Parkes' Museum of Hygiene by his Royal Highness the Duke of Albany. Many of our American visitors to the International Medical Congress in 1881 will remember the Medical and Sanitary Exhibition which was opened at South Kensington under the auspices of the Council of the Parkes' Museum. That exhibition financially was a great success, and afforded a large portion of the sum which has enabled the Council to obtain premises of its own in which to exhibit the best appliances for house drainage, ventilation, heating, and lighting, and other departments of sanitary science. Only the best appliances selected by the Council are admitted into the Museum, and great care is taken that it shall not become simply an advertising medium for enterprising firms who desire only to sell their slow-combustion stoves, or self-flushing siphon traps. Sir Charles Dilke, in his speech at the re-opening of the Museum in its new quarters, said, that, next to the Americans, the English were the most advertising nation on the

face of the globe, and that great care had to be taken that only the best appliances for the preservation of health should obtain admittance into the Museum. Arrangements have been made to give systematic courses of lectures at the Museum to architects, builders, plumbers, and mechanics of all sorts engaged in house construction; and the teachers of hygiene and public health at the medical schools are to be allowed to demonstrate to their classes from the articles contained in the collection. Among the other speakers at the re-opening ceremony were Professor Tyndall, the Archbishop of York, and Sir Spencer Wells.

After the recent war in Egypt great complaints were made against the administration of the medical department of the army. A commission of inquiry was instituted by the war office, presided over by Lord Morley, and many of the complaints brought against the department seem to have been justified. Some few years ago the regimental system which prevailed in the British army, that is, the appointment of two or three medical officers to each regiment, was abolished, and all the medical men connected with the army were formed into a separate department. Medical officers were appointed to different stations and did not move about with the regiments, and in time of war acted, to a certain extent, as an independent body, but dependent on the transport and commissariat departments for the materials for forming their field and base hospitals and for the necessary supplies. These several departments have not worked well together, and it is now the object to find out which is responsible for the miserable failure in Egypt. Undue censure seems to have been passed upon the medical department. There is no doubt that the class of men entering the army medical service is inferior to that practicing among the civil population. The inducements held out to men to enter the service nre not sufficient to tempt good men to join it. The abolition of the regimental system was very unpopular, and the social position of medical officers in the army, never very good, was by the change made much worse.

The social position of the whole medical profession in England is much lower than it ought to be. The distinctions lavished on other professions are very rarely conferred on medical

men; but the profession has itself to thank to a great extent for this difference. The amount of gratuitous work done by the profession in no way raises it in the public esteem. It is well known that it is not performed from motives of charity, but for the position which is gained by being attached to a hospital staff, and the hopes of a good practice ultimately accruing therefrom. This custom of gratuitous services to the hospitals has grown on the profession, and many a young physician and surgeon now is exhausting himself in mind and body by attending patients gratuitously at hospitals whose incomes are in some cases much greater than his own. This injustice the public, as represented by the people who support the hospitals, in nowise wish; they would be quite willing that the first charge on the incomes of the hospitals should be to adequately remunerate the medical men who attend upon the sick. But any reform in this direction must emanate from the heads of the profession. No profession can be expected to rise in social position when kept in a state of penury; and this poverty-stricken state of the medical profession, as it is in England, is a great deal due to the action of those who hold the highest position in it. They preach to the younger members, who are getting nothing from their hospital appointments, to keep up the dignity of the profession by never taking from a private patient less than their guinea or two guinea fee, when the same patient can see men of the greatest reputation and obtain their advice for the same amount. The senior men with high reputations ought never to take less than five or ten guineas; there would then be a chance of the junior members of the profession sometimes obtaining a patient.

One of the by-laws of the Royal College of Physicians of London is, that "no fellow or member of the college shall officiously, or under color of a benevolent purpose, offer medical aid to, or prescribe for, any patient whom he knows to be under the care of another legally qualified medical practitioner." The spirit of this by-law is being constantly broken, for medical aid and advice is often given by the best physicians and surgeons in London to patients who they think cannot pay their fee, but who could easily pay the fee of a general practitioner, and while acting as they think benevolently to the one they are de-

priving the other of his due and thereby lowering the status of the profession. In the out-patient departments of our hospitals this injustice is carried to an extreme, and the rank and file of our profession have ample cause for the bitter complaints they level at the London consultants. The elevation of the profession in the social scale is entirely in the hands of those who are called "the heads of the profession," and any inferiority under which it may suffer is entirely due to their action, and for which they may be considered responsible. Large incomes in England are made by about ten or a dozen of the leading medical men, and these are not so large as they ought to be. The rest of the profession is in a miserably under-paid condition. When a post of surgeon to a railway company was advertised last year, offering a salary of £600, there were four hundred applicants. And just lately a health appointment in the country, with a salary of £800 a year, which necessitated the obtainer removing to the district and foregoing all other descriptions of practice, brought forward over one hundred and fifty candidates, including some of the best men in the land.

The Lancet recently, in discussing the question, "Should women ride like men?" rather encouraged the silly custom which has prevailed for several centuries, of women riding on a side-saddle. The custom no doubt had its origin in the middle ages, when women rode behind their husbands, or other male relatives, on a pillion, and only clasped their companion round the waist, the security of their seat on horseback depending entirely on the male rider. *The Lancet* now has the temerity to say that a woman's seat on horseback "is fully as secure, and not nearly as irksome, as that which a man has to maintain;" when in reality a woman's seat on horseback is anything but secure, and in fact is most dangerous. The greatest care has to be exercised in selecting a horse for a lady to ride, that it shall have no vice; a horse that shies at all, or is known to have stumbled, is not considered eligible for a lady; and besides the dangers which are involved in the disposition or failings of the horse, the danger of a loose belly-band to a side saddle may sometimes be fatal, whereas when riding astride it is of much less consequence, and chiefly troublesome when mounting or dismounting. It is a disgrace that a custom should be perpetuated

which exposes our women in an unnecessarily dangerous position when on horseback, and prevents many from taking what would otherwise be a most health-giving and invigorating exercise. A change in this custom would also necessitate a change in female attire, and perhaps such a change will have to precede the change of position in riding. There is now an exhibition open in London, under the auspices of the National Dress Association, where several most graceful and becoming trouser costumes are on view.

"E. V. A."

NOTES AND ITEMS.

STANDING COMMITTEES OF MISSOURI STATE MEDICAL ASSOCIATION.—The following committees have been appointed for the meeting in Sedalia in 1884:

Committee of Arrangements—J. W. Trader, M. D., J. W. Jackson, M. D., Willis P. King, M. D., W. C. Overstreet, Jr., M. D., all of Sedalia.

Committee on Credentials—P. S. Fulkerson, M. D., Lexington, C. A. Todd, M. D., St. Louis, J. W. Brent, M. D., Tipton.

Committee on Scientific Communications—L. J. Matthews, M. D., Carthage, J. H. Duncan, M. D., Columbia, W. J. Beaver, M. D.

Committee on Progress of Medicine—R. T. Henderson, M. D., Shawneetown, J. W. Dreyfus, M. D., Louisiana, E. N. Gerard, M. D., Shelbina. *Sub-Committee on Psychological Medicine*—C. H. Hughes, M. D., St. Louis, Geo. C. Catlett, M. D., St. Joseph. *Sub-Committee on Diseases of Children*—J. P. Kingsley, M. D., and W. E. Fischel, M. D., St, Louis. *Sub-Committee on Dermatology*—W. A. Hardaway.

Committee on Progress of Surgery—F. J. Lutz, M. D., St. Louis, J. D. Griffith, M. D., Kansas City, R. E. Young, M. D., Jefferson City, T. F. Prewitt, M. D., St. Louis, J. T. Berghoff, M. D., St. Joseph, A. W. McAlester, M. D., Columbia. *Sub-Committee on Gynecology*—Wm. L. Barret, M. D., P. V. Schenck,

M. D., G. A. Moses, M. D., all of St. Louis. *Sub-Committee on Orthopedic Surgery*—Jacob Geiger, M. D., St. Joseph, T. E. Potter, M. D., Cameron. *Sub-Committee on R. R. Surgery*—J. W. Jackson, M. D., Sedalia, Pinckney French, M. D., Mexico, F. M. Johnson, M. D., Kansas City. *Sub-Committee on Abdominal Surgery*—Geo. J. Engelmann and Edward Borck, M. D., St. Louis. *Sub-Committee on Genito-Urinary Surgery*—G. Halley, M. D., Kansas City, W. H. Ford, M. D., Kansas City. *Sub-Committee on Ophthalmology*—S. Pollak, M. D., St. Louis, F. B. Tiffany, M. D., Kansas City.

Committee on Medical Education—J. E. Tefft, M. D., J. P. Chesney, M. D., St. Joseph, W. Humphrey, M. D., Moberly, J. S. B. Alleyne, M. D., St. Louis, G. M. Dewey, M. D., Keytesville.

Committee on Medical Ethics—A. E. Gore, M. D., Paris, E. W. Schauffler, M. D., Kansas City, W. C. Glasgow, M. D., St. Louis, H. H. Middlekamp, M. D., Warrenton, T. J. Norris, M. D., Macon.

Committee on Publication—C. H. Hughes, M. D., E. C. Gehrung, M. D., E. M. Nelson, M. D., all of St. Louis.

Committee on State Medicine—J. M. Allen, M. D., Liberty, D. H. Shields, M. D., Hannibal, G. Hurt, M. D., St. Louis, W. J. Heddens, M. D., St. Joseph, N. M. Baskett, M. D., Moberly.

THE COMMITTEE OF ARRANGEMENTS of the American Medical Association taxed the Association of American Medical Editors twenty dollars for the use of a room in which to hold their meeting one evening.

THE AMERICAN SURGICAL ASSOCIATION having a creditable bank account now has decided to have an annual banquet hereafter at its own expense. Undoubtedly the membership will largely increase.

ELECTRIC FRONTAL ILLUMINATOR.—M. Paul Helot, of Rouen, assisted by M. Trouvé, the electrician, has invented an electric illuminator, to be worn upon the forehead by means of a headband. It promises to be of great service to surgeons and specialists in operations or examinations.

RESORCIN promises to be the popular dressing for chancres, chancroids, mucous patches, etc. According to M. Leblond it is more efficient than iodoform in procuring cicatrization of these sores, and is free from the unpleasant odor of that drug. It may be applied in powder, or in a twenty-five per cent. solution in distilled water. The pain caused by the application is not severe and soon subsides.

ACCIDENT IN CATHETERIZATION.—DR. STANTON ALLEN reports a curious case. Dr. Bagby, having used a silver catheter in drawing the urine of a woman who had passed none since confinement about twenty-four hours previously, was unable to withdraw the instrument. It seemed to be attached in some way to the wall of the bladder. The conclusion was that a prolapse of vesical mucous membrane into the eyelet of the instrument had taken place, since a stylet passed into the instrument gave to the patient the sensation of something sticking into her. Finally, after unsuccessful attempts in various ways to remove it, a smart twist between the thumb and finger was given to the instrument, when it was freed from the attachment and was easily removed. The catheter contained a few drops of blood, and a few more followed its removal. She had no subsequent vesical trouble.—*Am. Jour. of Obstet.* June, '83.

INCREASED DURATION OF LIFE IN ENGLAND.—Modern vital statistics show that as the result of sanitary reforms effected in England during the last half century the annual death-rate has diminished and the duration of life has materially increased. It is computed that the mean duration of life of males has increased from 39.91 years to 41.92; of females from 41.85 years to 45.25 years, or of a generation from 40.86 years to 43.56 years, an increase of 2.7 years or nearly seven per cent.

THE LOUISVILLE SCHOOL OF PHARMACY FOR WOMEN will be fully equipped and ready to commence a full course of study next fall. All necessary apparatus will be provided for the chemical and pharmaceutical laboratories, and arrangements have been made for adequate financial backing. It is safe to predict a successful future for this institution. It is one of the very few new institutions the want of which has really been felt.

ST. LOUIS
COURIER OF MEDICINE.

VOL. X. AUGUST, 1883. NO. 2.

ORIGINAL ARTICLES.

IODOFORM IN SURGERY.

BY H. TUHOLSKE, M. D., ST. LOUIS, *Prof. of Clinical Surgery Missouri Medical College.*

[*Read before the St. Louis Medico-Chirurgical Society, May 29, 1883.*]

VERY slow has been the recognition of the value of iodoform in surgery. Discovered in 1822 by Sérullas, its constituents, carbon, hydrogen and iodine, were recognized by Dumas and Mitcherlich; its solubility, in different menstrua and chemical peculiarities, described by Liebreich, Moleschott, Rhigini and others. Of its therapeutic value we learned from Bouchardat in 1846, who recommended it in disease of the lymphatics and in goitre; in 1857 from Maitre, who claimed for it properties similar to those of other iodine preparations. In the sixties, the works of Moleschott and Rhigini attracted universal attention, and while the first predicted a great future for it, the latter, verifying the observations of previous investigators, ascribed to it antituberculous, antisyphilitic and antiseptic properties. While after Rhigini's essay iodoform came

into use in glandular swellings, tubercular and venereal ulcerations, and in various forms of skin diseases; and while its value as an internal medicine was being critically examined, it required nothing less than the demonstration by Lister of the superiority of the antiseptic wound treatment, and the recognition of the partial inadequacy of the agents used, to bring iodoform to the front rank of antiseptics. Carbolic acid, the antiseptic of the Lister method, had been found a local irritant, poisonous in children, inapplicable in certain parts of the body and objectionable in other ways. The merits of salicylic and boracic acids, of eucalyptol, etc., were being tested when v. Mosetig-Moorhoff, the talented surgeon of the Wieden Hospital in Vienna, experimented with iodoform, the antiseptic properties of which, in a general way, had been demonstrated by Rhigini. He was the first to apply it as a dressing in fresh wounds and to develop its methodical application. His results were so satisfactory to him, and brilliant beyond expectation, that a number of articles appeared from his pen in the latter months of 1880 and in the early part of 1881. Billroth had become sufficiently interested in the examination of these results to tentatively introduce it in his clinic.

It was at that time, when little had been written on the subject, and little had been done with that agent outside of Vienna, that I was in a position to witness its application in various forms of wounds in the clinic of Billroth and of von Mosetig himself. I then wrote a short article on the subject in the form of a letter for the COURIER, in which I stated briefly the indications for its use and the mode of application of the drug. I was so fully impressed with its value as an antiseptic, and with the surpassingly brilliant results to be gotten therefrom, that my interest once awakened in the subject has never in the least abated, and I determined to use it on all possible occasions and watch its actions. My opportunities, while not especially extensive, have been sufficient to test its powers in the vari-

ous directions indicated, and when now I report the results of my personal observation, I do so in the hope of bringing out by further discussion of the subject whatever be of value for or against it.

We find iodoform in the market in three distinct forms: first, the large, rough iodoform crystal; second, the iodoform in a powdered form, the crystalline shape and metallic lustre preserved; and thirdly, the impalpable powder. The first, when introduced into the tissues, from their shape and size prove irritants; the last precludes the very delicate application in thin films so readily made with the second. It is that form which I have generally used. As such it is employed for its antiseptic qualities in fresh wounds, where we aim at healing by first intention, and in wounds where repair by granulation is desired; second, for its antitubercular qualities after evidement of bones and after removal of fungous granulations, or in exceptional cases on such granulations when their removal is not feasible; thirdly, as a dressing for venereal ulcers, and as a topical remedy in diphtheritic processes in the throat and nose. It is used in the form of an ointment in painful ulcer of the rectum; as an absorbent in glandular and other swellings; in the form of an emulsion for the injection of joint or other cavities; as crayons or rods for fistulous tracks (Mitchell's fistula crayons are exceptionally fine), incorporated in gauze, available in many ways, and mixed with collodion painted over glandular swellings.

In this paper I shall attempt a critical examination of the value of iodoform as an antiseptic of almost universal applicability, and as an anti-tubercular agent—its claims to be considered an anodyne, anti-venereal and sorbefacient topical remedy of great merit being generally admitted. In the most thorough paper on this subject, by v. Mosetig-Moorhoff, all this is most enthusiastically claimed, and the remedy recommended because of its cheapness, of the ease of its application, its entire harmlessness in proper quantities. These claims have been

warmly advocated by a great many, but gainsaid by some; a good many points are still undecided—clinical observation will bring a final verdict. Objections because of its disagreeable odor can be waived at once in the face of its great usefulness. Attempts to cover its smell are laudable enough; the tonka bean does it best; some so-called deodorized preparations utterly fail in their claims in that direction, and occur in a form not to be recommended.

To vindicate its claim as an antiseptic of great power, and its applicability to the treatment of wounds where union *per primam* is expected, I beg to premise my report of a few cases by some general remarks.

No matter what the power of iodoform, in the treatment of a fresh wound it can fill but one indication, that is, by its quality as a germicide prevent decomposition of the wound fluids, and in doing this remove from the wound those chance changes which inaugurate septic absorption and pyemia. But to produce healing by first intention other indications are to be met—and upon the scrupulous, even the pedantic, observance of every detail will the result depend. How then are we to proceed in the treatment of a fresh wound? Arrest all hemorrhage, ligate all vessels of larger size with catgut or aseptic silk, close smaller ones by torsion, cleanse the wound thoroughly by irrigation, let every part of the wound be accessible, use clear water; the iodoform in contact with the whole surface will sufficiently protect it. Avoid carbolic acid irrigation; it increases the flow of wound secretions, which sweep off the iodoform. This should cover the surface in a delicate layer, a thin but uniform film—larger quantities separating the wound surfaces will prevent healing by immediate union. Drain judiciously; bring in absolute apposition not only the wound margins but the whole surface, and maintain it. Apply over it a dressing which will receive and diffuse the wound fluids, which will maintain an equable temperature, will exercise an elastic compression, and will produce absolute rest of the part: then

place it so as to favor the return of the venous blood and control arterial afflux.

CASE I.—Mrs. G., æt. 38, mother of six children, tumor on the left side of the neck, underneath the anterior part of the sterno-cleido-mastoid muscle, reaching from the sternum below to the top of the thyroid cartilage above, filling the carotid triangles; apparently movable, skin not involved, exceedingly painful, slight interference with deglutition; tumor has been growing five months. Diagnosis: malignant tumor, probably lympho-sarcoma, growing rapidly. Operation under very unfavorable circumstances, patient living in dark, badly ventilated, damp apartments, in impoverished circumstances. Anesthesia by ether; parts washed and scrubbed, then irrigated with a three-per-cent. solution of carbolic acid. Incision along the anterior border of the sterno-cleido-mastoid, from the hyoid bone to an inch below sternum, exposing the tumor underneath the sterno-hyoid and thyroid muscles on the sheath of the large vessels, as far down as the left brachio-cephalic vein underneath the sternum. Removed it with the knife, grooved director and finger; all hemorrhage being controlled, washed with clear water, dusted iodoform in a thin, uniform layer over the surface of the wound and into every part of it; the upper seven-eighths of wound was closed with sutures carefully adjusted; the lowest part was tented with iodoform gauze. Placing iodoform gauze in a number of layers over the wound, dressing was completed by adding absorbent cotton in a thick layer, covering this with gutta percha tissue, and all of this was held by a starch bandage, which immobilized the head and neck, and exercised sufficient compression through the elastic cotton to crowd the integument down to the deeper tissues. The gauze applied in layers immediately over the wound I think very important. Absorbent cotton placed over a drainage tube and receiving under pressure the wound fluids is apt to harden and close the tube. This is obviated by the gauze. Soft, large meshed, as it is,

fluid is readily diffused through it. Of just such import is the starch bandage. Rest being one of the important indications to be met, we might just as well be satisfied with procuring rest in a broken limb by suggesting the need of it to the patient as to depend on the common muslin bandages for securing to the wound the rest we desire. Temperature (thermometer under tongue), 8 P. M., 99° Fahr.; pulse, 110. 9 A. M. next day—temp., 99°; pulse, 100; slight vomiting from ether; bandage removed, found small quantity of bloody serum staining the gauze, through which it had nicely diffused; redressed as on first day. 3rd day, 9 A. M.—temp., 98½°; pulse, 90. 7 P. M.—temp., 98½°; pulse, 80. After this the temperature and pulse remained normal. Four days after the operation all of the wound which had been united by sutures had healed by first intention, the skin having united with the subjacent tissue. The sutures were removed, coming away dry; the tent was changed, moist with serum. Three subsequent dressings were applied at intervals of four days, when all of the wound was healed, not a tablespoonful of pus having been formed during the whole healing process. Dr. Prewitt kindly assisted at that operation. After recovery, the woman acknowledged that she was four months advanced in pregnancy, a circumstance she had carefully concealed by skillful answers. Up to date there is no return of the disease. The woman was delivered at full term of a healthy child, and is now in fair health.

Case II.—Mr. H. W., æt. 35, syphilitic, operated on in June, '82, at my office, for a tumor in the upper portion of the neck, filling sub-maxillary triangle. Tumor of two years' standing. An incision beginning on the face in front of the masseter muscle, passing over the lower part of inferior maxilla, extending over the tumor, four and a half inches in length, exposed the tumor. The removal was accompanied by free hemorrhage, requiring ligation of facial and lingual arteries, and a great number of lesser dignity. Treatment and dressing of wound as in Case I.

Patient sent home, a distance of twenty squares. Course of healing most favorable; never any rise of temperature; no redness or tumefaction of skin: union by first intention; recovery complete in ten days.

CASE III.—Mr. H., of Kansas City, tumor in the neck underneath sterno-cleido mastoid size of an orange, exquisitely painful, interfering with deglutition. Incision five inches in length along margin of the muscle exposed tumor which rested against the pharynx and esophagus, distinct capsule; ready enucleation of mass consisting of three lymphomata in close union. In this case drainage was difficult to accomplish, still meeting all indications as well as possible, the process of repair was aseptic throughout, without constitutional or local reaction.

CASE IV.—Mrs. G., æt. 68, patient of Dr. Gordon, of Pocahontas, Ills., was operated upon at her home near there for a lipoma the size of a man's head, situated on the left side of the posterior aspect of the thorax, below the scapula. An incision twelve inches in length exposed the tumor, found in parts springing from subcutaneous cellular tissue intimately connected with the skin; removal at such parts difficult, leaving skin poorly nourished. Carefully arresting all hemorrhage, irrigating with clear water, covering surface with iodoform, cutting four button holes for short drainage tubes, the integument was replaced and sutures applied. A firm dressing brought almost everywhere the skin in contact with the subjacent tissue. I learned from Dr. Gordon that but three dressings were necessary; that wound healed by first intention.

CASE V.—Jno. M., æt. 40, employed in a chemical factory, was put in my charge by Dr. R., of this city; patient's hand had been caught in a cog-wheel while the skin was burnt by some acid. An examination showed almost all the skin of the dorsum of the hand torn off, forming a flap, the base of which was opposite the metacarpophalangeal junctions. The tendons of communis digitorum were torn off from their connections; the second, third and

fourth metacarpal bones were broken, the muscles of the first interosseous space and ball of the thumb were crushed into a pulp, all sorts of dirt covering the wound. Thorough washing with solution of three per cent. of carbolic acid; removal of detached tendons, fragments of bone and trimming of muscles, flap returned and wound dressed according to Lister. Next day patient had a chill, rapid pulse, temperature 104° F. Removing the dressing found some sloughing of flap and muscular tissue. Again Lister dressing after removal of whatever decomposing tissue could be found, and having touched doubtful parts with five per cent. chloride of zinc solution. Patient's condition remained critical for something like six days; in spite of careful antiseptic dressing the wound remained foul. At a loss to account for this ill behavior of the wound I put patient under ether, applied Esmarch's bandage, resected the splintered ends of two of the metacarpal bones, cut off some tendons that had escaped attention, being concealed under the bones, rubbed the wound with a tampon of cotton dipped in an eight per cent. solution of chloride of zinc and applied iodoform dressing. The next day patient was comfortable; temperature reduced to 100° F. On removing dressing I found the wound sweet. Temperature now became normal and remained so. Second dressing was allowed to remain six days; on removal of it found fresh, bright, healthy granulations covering every nook and corner of the wound, while tumefaction of neighboring tissues had disappeared. Nothing now disturbed the healing process, the wound closing in about six weeks.

Case VI.—Mr. W., æt. 60, German, was injured in July last by boiler explosion; a piece of the boiler striking the thigh on the upper and outer portion. Examination showed lacerated wound two and a half inches in length on outer portion of thigh, some muscles protruding and plugging the opening. Introducing an aseptic finger into the wound, it readily entered its full length. Removing a quantity of coagula, the finger encountered the broken ends of the fe-

mur and recognized a number of loose spiculæ. I enlarged the external wound, trimmed muscles, removed detached pieces of bone, and some shreds belonging to patient's drawers. The pieces of bone removed, when put together formed about three-quarters of an inch of half the thickness of the bone. Attending to the position of the limb, a large drainage tube was introduced passing from without beyond the bone to inner side. Through it the wound was washed thoroughly with boracic acid water. The internal wound and interior as far as feasible was covered with iodoform followed by gauze and absorbent cotton. Finally short anterior and posterior splints were applied and put in a Hodgen's swing. A compound comminuted fracture of the thigh in a patient 60 years old is apt to induce a gloomy prognosis, but to my satisfaction at no time did any febrile action occur. The wound secretion was small in quantity, the drainage tube became useless after three days; the iodoform virtually transforming it into a subcutaneous fracture. The healing process, although favorable was very slow, formation of callus very scant, it is only at this present writing that union seems to be taking place between the broken ends. The external wound however closed after three weeks, and suppuration at no time occurred.

In such cases as just detailed carbolic acid, salicylic acid, eucalyptol and boracic acid might be considered as rivals of iodoform, but in the treatment of wounds in or about the mouth, rectum or vagina, iodoform stands supreme. Complete Lister dressings in those parts are an impossibility. Here we can admire the entire efficiency of iodoform as an antiseptic and profit by its ease of application.

CASE I.—Mrs. D., æt. 28, from Texas, was operated on for recto-vaginal fistula, due to syphilitic ulceration. The opening between the rectum and vagina, through which fecal matter escaped, was large enough to admit the index finger. A number of fistula tracks starting in the perineum ran obliquely upward towards the recto-vaginal septum

Having subjected the patient to a long course of anti-syphilitic treatment I proceeded to operate. Patient on her back, Simon's speculum and retractors in position, posterior wall brought forward by left index finger introduced into the rectum, the edges of the opening were broadly pared, a raw surface of an elliptical shape was formed, admitting of close coaptation of the margins from side to side. Very heavy silk was used for sutures. After thorough irrigation of the vagina with plain water, the wound was covered with iodoform-gauze and cotton tampons covered with an iodoform emulsion. The tampon, removed at end of four days, was not at all offensive; stitches were allowed to remain for twelve days, when on examination the wound was found closed and the sutures were removed. During the whole time the patient has been well.

Case II.—Mr. G., a patient of Dr. A., suffering from cellulitis of perineum, scrotum and ischio-rectal fossa and septic absorption, with temp. 105° F., pulse 120. Gas passing from the bowel into the ischio-rectal fossa raised the integument of perineum. Making a long incision, from the scrotum through the perineum and into the ischio-rectal fossa, a mass of sanious, foul pus and air bubbles escaped from the wound. The finger explored the ischio-rectal fossa, and a probe introduced found a large rectal opening. Splitting the intervening piece of bowel, and irrigating the wound, iodoform was thoroughly applied to the whole surface; iodoform gauze was packed into the wound and dressed. Now all febrile manifestations, as well as the erysipelatous inflammation of the perineum and scrotum, rapidly vanished. At the end of twenty days the patient had completely recovered.

Case III.—Mr. G., patient of Dr. R., presented upon examination a swelling upon the perineum, ischio-rectal fossa and scrotum, erysipelatous blush of the skin, high fever, and suppression of urine. Four or five long incisions made through the affected parts exposed a mass of black gangrenous cellular tissue and fascia of intensely offensive odor;

thorough antiseptic irrigation of the parts swept off much of that tissue; iodoform was then freely applied to every part of the affected surface; bladder emptied through a catheter, No. 3. Next day decided reduction of temperature, decrease of swelling in perineum, voluntary discharge of urine, slough separated readily without febrile disturbance, patient making a rapid recovery.

I think I am safe in affirming that the very favorable and rapid course in all of these cases was due to the disinfectant and antiseptic properties of iodoform.

Before considering the justice of the claim of the antitubercular power of iodoform, I shall mention the following cases:

J. W., of Belleville, æt. eight, has been suffering for six months with caries of tarsal bones. The little patient was pale, flabby, blonde, and large bellied; the swelling of the foot of slow development, presented three fistulous openings on the dorsum with sanious flocculent pus escaping. Probe introduced, readily met exposed bone, which was rough and offered little resistance. Having kept the foot in an antiseptic bath of boracic acid for two days, incision exposed the astragalus; the astragalo-calcanean joint and the cuboid in carious condition. Removed with a Volkmann's spoon the caseous looking mass and friable bone, as well as the flabby, fungous granulations studding the fistulous tracks everywhere, until all diseased parts seemed to have been removed. Then filling the wound with iodoform, adjusting here and there skin flaps and drainage tubes carefully, iodoform dressings and starch bandages were applied to foot and leg. Nutritious diet was ordered. Patient improved daily and gained in flesh. Wound granulated slowly but efficiently. After three weeks, dressing was applied once in five days; at the end of two months the wound had healed everywhere, the foot promising to become a serviceable member.

Mr. S., æt. twenty-four, book-keeper, in delicate health, consulted me in January last about an abscess in the back,

of a year's standing, and according to patient's statement it had formed at a point corresponding to the lower end of the shoulder blade. I found an abscess over the tenth and eleventh ribs, near the spine, four inches in diameter, the skin thin, brawny, covered with dry epidermal scales, very fluid contents, which, with patient in prone position, could be displaced upwards. Diagnosis: sinking abscess, a real noli me tangere—a thing to be avoided. I opened the abscess by transfixing, and found fistulous communications upward to the lower end of the scapula; laid open the track to its origin. After the escape of the characteristic pus, I scraped off the fungous granulations lining the abscess and fistulous track, applied iodoform, being careful to reach every affected part, packed with iodoform gauze, covered with cotton and gutta percha tissue, and fixed by starch bandages. Even in this case no reaction occurred, healthy granulations developed, and cicatrization eventually supervened. Had frequently to cut down the too luxuriant granulations. May 10th, patient discharged cured.

J. McC., æt. four, patient of Dr. S., sent to me for treatment of ulcer of the foot. Examination showed a lupus exfoliativus, affecting the anterior portion of the dorsum, extending to the skin of several of the toes, the whole being rather larger than a silver dollar, the margin presenting the characteristic nodular appearance. Without scraping the margins of the ulcer, iodoform, with cotton and firm bandages, was applied. The intense pain, which had prevented the child from resting day and night for some time, was arrested almost at once. Dressing the foot in the same manner every four days, a cure resulted. I had noticed a similar case treated in that way in Billroth's clinic. The anodyne effect of iodoform was readily noticed in this case. I have frequently observed it in painful ulcers of the rectum and the pain accompanying some diphtheritic troubles of the nose and throat.

With the recent change of opinion on the subject of tuberculosis, the treatment of caries of bones and of fungous

inflammation of joints assumes a new aspect. The experiments and observations of Volkmann and Koenig lead us back to the teaching of Rokitansky, that caries and fungous inflammations of joints mean tubercular disease. It is foreign to this paper to enter into a discussion of this subject, but whether considering tuberculosis a specific disease, depending, according to Koch, upon the tubercle bacillus, or, according to Formad, as a neoplasm of inflammatory formation of the scrofulous, our treatment must henceforth be directed to the destruction of the affected part and the infective material contained therein. Resections, for a time in universal favor, are commencing to give way to amputations or to evidement, ignipuncture and iodoform.

But iodoform comes only second in power as a destroyer of tubercular processes; it follows efficiently upon the heels of the sharp spoon and the thermo-cautery. I have used the fistula crayon repeatedly, but this treatment, if not preceded by removal of the fungous masses, is uncertain and unsatisfactory in its results. Iodoform undoubtedly has anti-tubercular properties, whether sufficient to combat single handed a carious joint, I doubt much. In conclusion, I would say that iodoform loses its usefulness to the wound as soon as the granulations have grown even with the surface; it does not hasten cicatrization; it stimulates the luxuriant granulations beyond the desired end. Never have I seen any poisonous effect in the hundreds of cases in which I have used it.

THE MANAGEMENT OF ABORTION.

BY WALTER COLES, M. D.

[*Read before the St. Louis Obstetrical and Gynecological Society, April 19, 1883.*]

I FEEL that no apology is necessary in introducing the subject of the *management of abortion*. And in order that our discussion may not assume too wide a range, I pro-

pose to confine it to a consideration of the discharge or delivery of the secundines. *When* and *how* should the physician interfere with this process, are important practical questions, the solution of which, although they have been frequently answered, is by no means definitely settled, if we are to judge by the diverse views which have of late been promulgated on this subject.

It is the duty of every physician and surgeon to keep himself informed, as far as possible, on all important advancements in the special branches which he may practice, and he is certainly morally culpable if he neglects to avail himself of every attainable improvement whereby he may give his patients the best advantages in his power.

In view of the advanced doctrines which have been recently published in certain quarters, wherein the "*immediate removal*" of the secundines is laid down as the inexorable rule of practice, it behooves those who are less heroically inclined to defend their position, lest our conduct become the subject of criticism. Whether such criticism be just or unjust would depend not so much upon what might be said of it, as on the intrinsic merits of the practice pursued. With the object of bringing out discussion on this point I propose to briefly compare the various plans recommended, in order, if possible, to arrive at an understanding as to the safest and best method of dealing with this, often perplexing and troublesome, class of cases.

In the *American Journal of Obstetrics*, Feb., 1883, Dr. Paul F. Mundé, of N. Y., has written an article entitled, "*The immediate removal of the secundines after abortion*," in approval of another paper in the same journal by Dr. Alloway, of Montreal. The title of Dr. Alloway's paper is "*The immediate use of the uterine scoop or curette in the treatment of abortions, vs. waiting, or the expectant plan.*" Dr. Mundé says: "Having now expressed my opinion that the future safety of the patient demands that the secundines should be *at once* removed after expulsion of the fetus in every case of abortion in which such removal can be ac-

complished without force sufficient to injure the woman, I will proceed to describe the manner in which it has been my custom to perform this operation." The doctor then goes on to say that when called to a case in which the fetus had already been expelled, he would proceed "*at once*" to "*forcibly*" deliver the secundines by manual or instrumental means, provided the cervix was sufficiently patulous to admit a finger or curette, the patient being chloroformed for the purpose, and, where contraction of the internal os exists to such an extent as to prevent this, he would immediately resort to forcible dilatation. As I understand them, this would be the practice of Drs. Alloway and Mundé in all cases where there was reason to believe that any portion of the ovum or its appurtenances were still retained in utero, whether the immediate symptoms were urgent or otherwise; furthermore that they would follow this practice to the exclusion of what is ordinarily known as the *expectant plan.*

While it is far from my desire to detract from much that is meritorious in the two papers alluded to, candor impels me to say that the doctrines inculcated therein are somewhat ultra and dangerous in their tendencies, being too dogmatic and sweeping in character, while at the same time they are lacking in fairness towards those who hold more conservative views. Dr. Alloway commences his paper by remarking that "In recently published text-books on obstetrics, we find insufficient stress laid upon the importance of removing *at once* a retained placenta after abortion." Dr. Mundé, in endorsing the foregoing, places all who would not advise the immediate chloroforming of a woman and "*at once*" and "*forcibly*" removing a retained placenta, as in favor of a "*let-alone*" policy. Now this is by no means a fair statement of the attitude of our "*older confrères*," or of the less "*progressive*" among the younger members of the profession who are not *en rapport* with such advanced ideas. There is certainly a broad intermediate ground between a "*do-nothing*" and "*let-*

alone" policy and the heroic measures recommend by Dr. Mundé.

Although the act of abortion is a pathological process, yet, like most other such processes it is more or less amenable to natural laws, which when properly guided and directed generally lead to a favorable termination. Under such circumstances nature often needs judicious assistance, but according to my experience it is seldom that her powers are so absolutely impotent as to require that they be unceremoniously ignored and supplanted by art.

To everyone of experience it must be apparent that no routine treatment can be laid down for abortion. While certain fundamental principles must govern our action, our precise line of conduct will depend upon the circumstances surrounding each individual case. In a word, it is the attendant's duty to reduce bleeding to a minimum and see that the uterus is effectually emptied at the earliest practicable moment. The methods which he should adopt to attain these ends must of course vary according to the stage of pregnancy, the degree of hemorrhage, and the condition of the os. Sometimes in early spontaneous abortions the entire ovum with all its annexæ will have escaped before the physician arrives. In such cases, although the hemorrhage may have been serious, it will be found to have nearly or quite ceased, and there is left little or nothing to do. Not unfrequently, owing to carelessness in disposing of blood-clots, the attendant finds himself in doubt whether the abortion has been completed or not. Under such circumstances he must be guided by certain indications. If he finds that all pain has ceased; that hemorrhage, which before had been considerable, has all stopped; that the uterus has been reduced in size, that its os is soft and patulous, and with no indication of any substance presenting from within, he would be warranted in assuming that the uterus was empty. Nevertheless it would be safe to administer a full dose of ergot, and, if any doubt remain, it would be well to place a temporary tampon in the vagina

before quitting the house. This would be all that the utmost prudence could require under such circumstances; the attendant would certainly not be justified in forcibly dilating the uterus and scooping its interior without first "waiting" for the development of some evidence of retained secundines.

But, let us suppose that we have been called to a case in which the embryo has just escaped during the third month and the secundines are retained. Under such circumstances there is generally considerable hemorrhage going on, and the first thing in order is to check it. Of course the most effectual and desirable method of so doing is to empty the uterus and cause it to contract. A teaspoonful of fluid extract of ergot is administered, and the accoucheur at once examines the uterus. If it be practicable by digital manipulation, or the aid of forceps, to deliver the placenta, this is a fortunate circumstance which should be availed of on the spot. But if the os is too contracted to admit the finger, or even if patulous and the membranous placenta is so adherent as only to be detached in fragments, it is better not to disturb it for the time being, rather than resort to immediate and forcible extraction. We should, however, be equally far from pursuing a *passive* policy; the hemorrhage should be controlled by means of a tampon, aided by ergot, supplemented by a full dose of tinct. of opium—the latter being especially beneficial as a soothing stimulant after blood loss. A tampon ought always be applied with the aid of a speculum, that of Sims being the best. There is a great deal in the method of tamponing; it should be carefully packed over the os and around the cervix. The best material is old cotton muslin torn into strips; I prefer to put it in dry. Sponge is of very little service as a tampon; it absorbs the blood and permits it to flow through.

In most cases thus managed the physician will find on removal of the tampon twelve hours later that the secundines have either escaped entire, or else are presenting at

the os, whence they may be readily removed by very slight manipulation. But in case this cannot be done without violence, it would be proper to wash out the vagina and again tampon, with the expectation that under the excitation of the plug and the continued influence of ergot the uterus will by its contractions detach and expel its contents. If at the end of twenty-four or thirty-six hours there is no indication of dilatation, it will be quite time enough to consider the propriety of artificial dilatation and extraction. If the internal os continues closed, it is pretty conclusive evidence that the placenta is still adherent and hence not extensively decomposed. Lusk recognizes this condition of the internal os as a valuable indication—a fact pointed out by Hüter. He remarks that "When decomposition has once set in, the os internum will, as a rule, allow the finger to pass into the uterus." Such being the case, we have less reason for being in a hurry when the uterus is closed than if the inner os were lax and the discharges offensive; under the latter condition of things the practitioner should lose no time in emptying the uterus of all decomposing material, provided he can do so without inflicting too much violence on the organ itself.

All I am contending for is against extreme measures either way. Of course there are cases in which the medical attendant would be culpable if he did not resort to the methods advocated by Drs. Priestly, Alloway, Mundé and others. No doubt all of us have seen such cases, and that we have been called to patients where some such active policy had been too long neglected. The testimony which these gentlemen bear to the utility of the curette and forceps is valuable, but that scoop or curette should be resorted to *primarily*, before *giving nature any voice in so important an affair*, certainly savors of rash practice, fraught with unnecessary suffering and danger.

The advocates of immediate and forcible removal of the placenta are rather disposed to exaggerate the danger from hemorrhage. I would by no means underestimate the

gravity of the serious depletion sometimes incident to abortion, but cases of fatal flooding must be exceedingly rare. In the majority of instances the most serious bleeding will be found to have already taken place before the physician reaches the patient; this usually commences prior to and during the extrusion of the embryo, to be greatly augmented immediately after this act and in the interval between it and the arrival of medical aid. I dare say this is the observation of all of us. Indeed, I may say that when a case of abortion is carefully watched from the start and properly managed with tampon, ergot and opium, it must be exceptional for anything like a fatal or even dangerous hemorrhage to occur. At any rate the danger from this source is not sufficiently imminent to warrant immediate and vigorous measures for forcible extraction of the secundines when the chances are ten to one that nature when judiciously aided will accomplish the same end with much less hazard. For no matter how skillfully and cautiously done, a young, almost membranous placenta, when adherent and in a perfectly fresh state, cannot be detached without a certain degree of force, which materially aggravates the traumatism already existing and which is one of the chief and unavoidable dangers in every case of abortion.

We are assured by the advocates of immediate removal that this feat is very easy of accomplishment,—a thing which the merest tyro may perform—but most of our leading obstetrical authorities entertain a different view of the difficulties and dangers involved. Playfair, while admitting the desirability of emptying the uterus when feasible, goes on to say: "Cases, however, are frequently met with in which any forcible attempt at removal would be likely to prove very hurtful, and in which it is better practice to control hemorrhage by the plug or sponge tent and wait until the placenta is detached, which it will generally be in a day or two at most." Barnes reiterates the same advice, and cautions us that "We must not persevere too pertinaciously in the attempt at removal lest we inflict injury

upon the uterus." The same author, recognizing the fact that the placenta, after abortion, quickly undergoes retrograde changes whereby its adherence to the uterine wall is weakened, thereby facilitating its removal, remarks that "The consulting practitioner here occasionally reaps credit which is scarcely his due. He is called in, perhaps, on the third day, or later, when the adhesion of the decidua to the uterus is breaking down. He passes in his fingers and extracts at once. But, had he tried the day before, he might have failed like the medical attendant in charge. (*Obstet. Operations*, p. 359.)

In this connection I trust I may be excused for again referring to the papers of Doctors Alloway and Mundé. Dr. Alloway publishes five cases which he "treated by *immediate removal* of the secundines with the curette," and yet, strange to say, but *one* of them is in any sense illustrative of the principle inculcated in his paper. For in one the placenta was removed on the third day; one on the seventh and eighth days respectively, while the fourth was simply the premature delivery of a syphilitic child in the sixth month, and of course he delivered the after-birth, as is usual in obstetric practice. Dr. Mundé's table, in which he gives the result of fifty-seven cases in his own hands, is open to similar criticism. It certainly does not illustrate the "*immediate*" delivery of the secundines, as in thirty-nine, or upwards of sixty-eight per cent. of his cases, they were delivered after the lapse of from twenty-four hours to sixty days. Indeed, so far as delivery "*at once*" with the curette is concerned, we look in vain for a single typical example—there being but four instances in which this instrument was employed under eighteen hours, and even in these only after the lapse of "several hours." In nearly all the cases where Dr. Mundé resorted to the curette, the instrument was clearly indicated to dislodge putrid masses after the lapse of several days or weeks; and the fact that they terminated so favorably would indicate that there is less danger in temporary retention than is generally supposed, and

furthermore, that as a *secondary measure of relief*, the curette is a valuable resource, as has been long since pointed out by Matthews Duncan and others. To this extent Dr. Mundé's statistics are interesting, though it would seem that they contain no data sufficient to warrant any decidedly new departure in practice, or as bearing on the special points advanced in his paper.

Whenever the uterus can expel the placenta within a reasonable time, that is to say, before decomposition takes place, it is better to rely on nature than on mechanical force, for the reason that uterine contraction nearly always effects a more perfect separation and cleaner deliverance. This is also much more apt to occur if the secundines are not interfered with, and are allowed to come away *en masse*. It is always a misfortune, to be guarded against if possible, when the placenta is broken into fragments, for we can then never be quite sure that we have gotten it all, while the consequent diminution in bulk renders the uterus less able to expel any remaining portions, which may tend in future to provoke continued bleeding, or septicemia, two of the evils sought to be avoided.

Whenever there is serious and persistent hemorrhage threatening to exhaust the patient, active interference is of course demanded. Or, if there is an offensive discharge, and an elevated temperature together with rigors, we have good reasons to apprehend blood-poisoning from the absorption of putrefying elements within the uterus. Under such circumstances it would be proper to explore the interior of this organ, dilatation being resorted to if necessary. For this purpose the tupelo tent is certainly far superior to the sponge or sea-tangle. It has all the dilating qualities of sponge, while it is cleaner and can be introduced more readily, even without a speculum if desired. It has also the advantage over the sea-tangle in that it can be procured in larger sizes and is less liable to slip out of position. Whenever full dilatation is required the tupelo is preferable to all other tents. The uterine cavity having been

exposed, all fragments of secundines should be carefully dislodged with either the finger or curette, after the manner so well described by Lusk and Mundé, and the organ washed out with some disinfectant fluid. Where there is a tendency to bleeding, tincture of iodine answers an excellent purpose, and is cleaner than perchloride or persulphate or iron as recommended by Barnes. Where the disintegrating fragments are small, repeated irrigation of the uterine cavity (the os being patulous) will generally suffice, as they usually melt down and come away with the discharges. It is not safe to scrape the uterine surface more than can be avoided, for fear of opening up fresh avenues by which septic materials may reach the system, since we know that nature interposes a bar to infection by glazing over denuded surfaces and closing gaping vessels. For this reason Lusk remarks that "Fatal results are, however, rare, as decomposition is usually a late occurrence, setting in, as a rule, only after protective granulations have formed upon the uterine mucous membrane and after the complete closure of the uterine sinuses. (*Science and Art of Midwifery*, p. 297.)

In 1875 I contributed several articles to the *St. Louis Medical and Surgical Journal* on the subject of "*Abortion, its Causes and Treatment.*" The following is the concluding paragraph of my last paper on that subject: "In all cases of abortion when there is is a prompt and clean delivery, but little trouble is to be apprehended. Matters do not always progress thus favorably however, and the practitioner frequently finds himself confronted with one or more of four complications, for which he should always be on the alert: these are *imperfect deliverance*, *hemorrhage*, *septicemia* and *inflammation*. Now these conditions nearly always bear a certain reciprocal relation to each other, as well cause and effect, as in point of absolute danger. What are these relations; what their comparative danger? The proper answer to these queries embodies the practical management of abortion. The dilemma may be thus stated: If there is imperfect deliverance we are almost sure to have

hemorrhage, whilst if in order to staunch the latter, we use heroic means to obviate the former, inflammation may be provoked; on the other hand if these measures are neglected, there is risk of septicemia. The whole question therefore turns upon the comparative importance inherent in each one of these conditions. The writer is clearly of the opinion that of all these complications *inflammation* is the one most to be dreaded; and for the reason that women *rarely flood to death* during abortion, while *many die from inflammation*, the result of rough manipulation of the uterus. Not only is this so, but inflammation under such circumstances is peculiarly liable to septic complications; indeed it is quite certain that the breaking up and gouging out of the placenta, by which the mucous membrane is bruised and lacerated, predisposes more certainly to septic fever than the temporary retention of the secundines would be likely to do. Even with the greatest care it is frequently impossible to remove the after-birth without breaking and leaving more or less behind as the focus of fresh hemorrhage, irritation and poison; whereas if left to nature for a few hours, or even days, easy detachment might be effected, great peril avoided, and perhaps a life saved. The good old maxim, 'meddlesome midwifery is bad,' applies as well to the management of abortion as to labor at term, and *unless there are clear indications for it*, of which every man must judge for himself, we hold that it is better to pursue an expectant policy in reference to the placenta, believing that upon the whole the risk is less when nature has at least some voice in its detachment and delivery, than when it is precipitated by unnecessary interference."

Such, Mr. President, was my conclusion eight years ago, and experience and observation during the interval but confirms this belief. Undoubtedly the chief peril of the aborting woman is *inflammation*, whether the result be death or the well-known train of aches and ills which follow in its wake. The moral of which is that we should treat the uterus under such circumstances with as little violence as possible.

COMPARATIVE MORTALITY, INSURABILITY AND PROCLIVITY TO DISEASE IN THE TWO SEXES.

By P. V. Schenck, M. D., *Clinical Lecturer on Gynecology, Mo. Med. College.*

[*Read before the Missouri State Medical Association, May 17, 1883.*]

(Continued from the July Courier).

HAVING now compared the female sex with the male as regards mortality, let us look whether this same relation is proven as to the proclivities to disease. In the local diseases, which furnish 38.60 per cent. of the total mortality, first come the *cerebral* and *spinal diseases.*

The female sex is essentially *nervous;* in women the emotional system is less inhibited by the higher centers of the central hemispheres; the ganglionic system is doubly taxed; there is numerically a greater proportion of nervous temperaments; there is an exalted nervous irritability; the mental influences surrounding the pregnant, which influences Dewees tells us are "the sorrows of bringing forth," are depressing; yet on the other hand men are not free from nervous ills; though they may not be as numerous, yet with them the fatality is much greater, and the fatal forms are more frequent; while women suffer from hysteria, men suffer from hypochondria; while women have hemicrania, men have sciatica; while women suffer from menstrual neurosal troubles, the neuroses of the sexual apparatus are much worse in men than in women. Greater bodily and mental exertion are required of the male sex, and men are more liable to injuries, and they have a greater tendency than women to excessive indulgence in those pleasures which make a demand upon the nervous system.

In the etiology of local diseases our text books show the following preponderance of sex:

Apoplexy.[1]—Men are markedly more liable than women. Frank places the proportion at 10:1. Desermond asserts

[1] In the following tables the names of diseases which occur most frequently in males are indicated by italics; in females by small caps.—[Ed.

that women are but little subject to apoplexy at the change of life.

Abscess of the Brain.—More frequent in males in the proportion of 2 : 1. This disease does not depend upon the frequency of injuries in the male sex, for the same truth exists in the earliest periods.

Convulsions.—A much larger number of male than of female children die from convulsions.

CHOREA.—The female is decidedly more troubled than the male.

Cerebro-Spinal Sclerosis.—Most frequent in male sex; according to Chvostek 10 : 6.

HYSTERIA.—Not exclusively confined to the female sex, but it occurs in them with preponderating frequency. Bugert reports out of 1,000 cases only 50 males.

Insanity.—The greater proportion of cases of dementia paralytica is found in males according to Sanders, 7.5 : 1.

Myelitis.—Either acute or chronic is more liable to occur in the male sex.

Meningitis.—Cerebral, more frequent in males. Faidel gives the proportion at 77.4 : 22.6.

Spinal, attacks by preference the male sex.

Cerebro-Spinal, in larger proportion in males than in females.

NEURALGIA.—The prognosis is more favorable in males. In the fifth pair of nerves it is more frequent in women, the proportion, according to Valleix 143 : 124; Hasse 30 : 27; Schaum 136 : 59; Erb 51 : 21.

INTERCOSTAL NEURALGIA excess in females according to Valleix and Basseneave 51 : 11.

HEMICRANIA shows a preference for females 5:1. Supra-facial cutaneous 5 : 2. Trigeminus, according to Eulenberg, 24 : 5. Occipital, 10 : 2. In neuralgias of the extremities the male sex predominates. *Brachial*, 4 : 6. *Lumbar*, 3 : 1. Sciatica, Valleix, 72 : 52; Eulenberg, 25 : 7; Erb, 40 : 10.

Paralysis.—Hemiplegia. By far the greater number of cases occur in the male sex.

Paraplegia. The statistics of Pellegrino and Levi show the rate of excess in the male of 12.4 per cent.

Agitans. Men much more frequently attacked than women.

Progressive Muscular Atrophy.—The male sex shows a decidedly greater tendency than the female, in the ratio, according to Frederick, 143:33; according to Eulenberg, 17:11.

Pseudo Hypertrophy of the Muscles.—Male sex predominates, according to Eulenberg, at a ratio of 10:16; when several cases occur in one family the males are the only ones affected.

Spinal Nervous Weakness.—Predisposition to this affection is much more common in the male sex.

Tetanus.—A large majority of the cases occur in males. Frederick reports 210:42; Curling, 112:16; Lawin, 329:68.

Tumors of Brain and Membranes.—Occur more frequently in males, according to Oberneir, 10:6.

Tabes Dorsalis.—Male sex shows decidedly a greater predisposition, according to Erb, 74:9; McCane, 2.5:1; Topenaid, 5:1; Steinthal, 7:1; Eisenmann, 2.5:1; Schulze, 4:1; Cyon, 3.5:1.

Next come the diseases of the circulatory system. The conclusion would be natural that women would suffer here more than the opposite sex, when we consider the influence exerted by the nervous system, the uterine reflex action, the state of gestation with its hypertrophy of the heart, the act of parturition which brings an increase of arterial pressure, calling the blood in large quantities into distended vessels. We know there are rapid pulses which are of neurosal origin. All these things would tend to produce circulatory lesions, yet the male sex suffers here again the more. Severe exertion long continued causes disease by its exhausting effects.

Aneurism.—More frequent in men than in women, aneurism of the external arteries are especially rare in women. Chronic aneurism of the heart, according to Söbel and Thurman, occurs more frequently in the male sex. Aneurism of the aorta is more frequent in males than females at the rate of 3:2; aneurism of abdominal aorta 51:8; aneurism of left ventricle 3:1.

Diseases of the Arteries.—Chronic endarteritis, an extremely frequent disease in advanced life, most frequently at-

tacks the male sex. *Stenosis of aorta* is comparatively a rare disease among women. *Aortic regurgitation* is less rare in women though they are comparatively free from it. The proportion of the sexes with stenosis of aorta is 3:1. CONGENITAL NARROWING of the aorta is more frequent in women than men, and they suffer more extreme degrees of it.

Diseases of the Heart.—Angina Pectoris.—The great majority of cases are males, 80:8; Forbes places it 11:1.

Dilatation of Heart.—More prevalent in men.

Endocarditis.—Most prevalent in men, 3:1.

Fatty Degeneration.—Males in excess 2:1.

There is a disease simulating fatty degeneration, especially at the change of life, but it is nothing but a passive asthenia uncomplicated by structural decay. Such patients are usually females in the upper classes of society. Women are less liable to die suddenly in disease of the muscular walls of the heart than men, and in many cases of heart failure in women there is a pertinacious, cat-like tenacity of life, till every painful sequel of heart failure is reached and death takes place at last slowly from carbonic acid poisoning.

Fibroid disease of the heart is more common in men than women.

Hypertrophy.—Pure hypertrophy is comparatively rare in women, the proportion of all grades of hypertrophy in men and women will be as 2:1.

Myocarditis.—The acute occurs according to the compilations of Söbel, Dittrich and Steni more commonly among men than among women. The same is the fact in the chronic form.

PALPITATION.—This is largely a woman's malady, and ovarian excitement is its common cause.

Pericarditis occurs most frequently in the male sex, 4:1; and the primary disorders which give rise to it show the same preference.

Rupture.—Spontaneous rupture is very much more common among men than among women. In the collection of cases by Elléaume, out of sixty-one cases thirty-seven were males and twenty-four females.

Valvular Disease.—Aortic valvulitis is a disease of males rather than females. Strain is the great factor in its etiology. Rheumatic disease of valves is very rare in women.

The next order of the class of local diseases is the respiratory. This demands notice because there is greater mortality from it than from any other order of this class; and there is a peculiar association between some of its diseases and the female sex, especially during the existence of pregnancy. Thus pneumonia has been looked upon as much worse in the female than in the male, and it has been believed that the danger increases in pregnancy, and that when it produces abortion it is the more dangerous.

Bronchitis.—Bronchial Catarrh has been shown by Copland to be much more frequent in males than females. Lebret has shown the same facts in the statistics from cliniques at Breslau and Zurich. Indeed he shows that bronchitis in all its varieties is more frequent in males.

Croupous Bronchitis, in both its acute and chronic forms, is observed more frequently in males than females. In the acute form, according to Lebert, the proportion of men to women is 11:6, or nearly as two to one; for the chronic form, according to the same author, it is nearly 3:2. Bresner, who has analyzed fifty-eight cases, records nineteen in females and thirty-nine in males.

Emphysema and Asthma.—Much more frequent in males than females, at the proportion of 2:1. The occupation and the mode of life cause the greater number of cases in the male. In bronchial asthma men suffer more than women, at the rate of 2:1.

Hemorrhage of the Lungs.—The male sex is more subject than the female. Ogston, out of twenty cases, reports fifteen males and only five females.

Gangrene of Lungs.—Läennec has shown that it is more frequent in men than in women. The cases reported by Kaulich support this view. He gives the ratio as 7:2. Lebert reports a ratio of 22:10.

Diseases of the Larynx and Trachea.—Males are most liable to inflammation of the larynx. Chronic catarrh of the larynx occurs in men far more frequently than in women. The immunity from laryngeal and tracheal diseases in the female sex has been observed by Serres, Louis, and other pathologists; the latter, in his work on Pulmonary Phthisis, has reported among his valuable statistical observations fifty-three of ulceration of the

epiglottis, of which thirty-nine occurred in men and fourteen in women; also eighty-six cases where lesions were found in the larynx, sixty-six of which were men and twenty-six women. Of ulcerations of the trachea, one hundred and seven cases are reported by Louis; of these, thirty were in females and seventy-seven in males. The same difference exists in *follicular disease* of the *throat*; of fourteen hundred cases reported as to sex, not more than one in four occur in women.

Phlegmonous Laryngitis.—This is more common in the male sex: the statistics of Sestile show the proportion to be 131 : 56.

Neoplasms of Larynx.—Mackenzie has shown that the proportion is greatly in favor of the female sex, at a ratio of 197 : 90. The masculine larynx may rest on other ground than that of occupation alone, for Cansil reports, among forty-two little children who suffered with laryngeal neoplasm, twenty-eight were males and fourteen females.

Perichondritis Laryngea, and its results, show the male sex the most liable. The ratio, as shown at the Berlin Pathologico-Anatomical, is 16 : 4.

Paralysis of the Crico-Arytenoides muscles.—This occurs mostly in males in the ratio of 7 : 2.

Spasm of the Glottis.—This occurs in males in the ratio 2 : 1, as compared with females. Taking the statistics, we find that out of 554 cases 386 were males and 158 females.

Pneumonia.—Is less common in females than in males, and they possess a certain immunity in comparison with men. Taking the statistics of Vienna and Stockholm, we find as follows: At Stockholm out of 2,710 cases of pneumonia, 2,259 were males and only 451 were females. At Vienna, out of 7,942 cases of pneumonia, 5,467 were males.

In *Interstitial Pneumonia* nearly four men are affected to every three women, or a ratio of 63 to 37.

In *Chronic Pneumonia* the males are in excess in proportion to females as 22 : 16. Females are more liable to double pneumonia than males and the disease is more fatal in females, especially during pregnancy. Grisolle reports his loss in such cases as eleven out of fifteen, as an instance of the protecting power of pregnancy, but few cases of this disease occur during that period. With the double pneumonia and increased fatality combined,

the total mortality of the female sex is far below that of the male.

Pleuritis.—The male sex suffers most especially from primary pleurisy, and during early and adult life. In London only 43.1 per cent. of the fatal cases of pleurisy are women.

The next division of local diseases is the digestive. There are some affections in this, especially those connected with the hepatic function, that have a peculiar tendency to occur in the female sex. The causes thereof would make an interesting subject for study, did the province of our article permit.

Amyloid Liver.—Occurs considerably more often in the male than in the female. Frerichs reports a ratio of 53: 15. Wegner 33: 15. The difference, says Frerichs, is the more striking because the diseases which induce this degeneration by no means specially affect the male sex.

Atrophy of Liver.—The female sex suffer oftener from acute yellow atrophy while males suffer oftener from cirrhosis. Pregnancy may give rise to two forms of jaundice, which in their symptoms and results present very different characters—one of little importance, the other is associated with serious lesion of hepatic tissue; there is serious derangement of the nervous system. This depends upon acute atrophy.

Colic.—More frequent in females.

Enteralgia.—More frequent in females than in males.

Fatty Degeneration of Liver.—More frequent in the female sex than in the male, in the proportion of 2.2: 1.

Fissure in Ano.—Women are the most liable to suffer, and it is due to the tendency to constipation, and the pressure of the enlarged womb upon the lower intestine, in which it embarrases the circulation.

Gastritis.—More frequent in the male sex. They are rendered more liable from irregular eating and drinking, and the excessive use of stimulants. Phlegmonous gastritis occurs in excess in males at a ratio of 26: 5.

Gastric Ulcer.—There is a very great excess in the female sex.

Gall Stones.—Females suffer by far the most frequently from gall stones. Hein's statistics show gall stones in

the female as compared with the male in proportion of 3:2, while Durand and Faidel place it at 88 for females to 38 for males. Soemering says that biliary calculi are more frequent after the cessation of the menses, but Willimen proves that such is not the fact. He attributes the excess to sedentary habits and the constriction of the liver by corsets. Morgagni contended that biliary and renal calculi most always coexisted, and argued that a gouty diathesis was at the bottom of it. This cannot be so, for females are almost exempt from attacks of the gout.

Gastralgia and Gastrodynia.—More frequent in males than females.

Gastric Catarrh.—Occurs oftener in men than women. Men are more exposed than women to the causes which induce this affection.

HEMATEMESIS.—Handfield Jones places females much the more frequent at a ratio of 74:26.

Hernia.—More frequent in males. Diaphragmatic hernia is also more common in males than females.

Hemorrhage from the Intestines.—While gastric hemorrhage occurs more frequently in women than men, the reverse is the case in regard to hemorrhage from the intestines.

Hypertrophy of Liver.—The liver of a man is no larger than that of a woman, except in scrofulous women the liver is larger because the deposit of fatty matter is more marked.

Intussusception of Intestine.—More common in males than females, 2:1. Compression of intestine by the mesentery is more rare in women than in men. While STRANGULATION by PERITONEAL FALSE LIGAMENTS, by peritoneal adhesion, occurs more frequently in women than in men, and incarcerations in the cavities of the pelvis occur four times as frequently in women. This is partly made up by the fact that *strangulation* by *false ligaments* in the *abdominal cavity* (including the upper pelvis) is more frequent among men than women. The incarceration from false ligaments starting from herniæ is also more frequent among men than among women.

Pancreatitis.—Men are more frequently affected than women with diseases of the pancreas. In Claessiu's table of 322 cases, 193 were males and 129 females.

Perforation of Esophagus.—Zurker reports 77 males and 25 females. Vigla shows 14 men and 4 women.

Peritonitis.—Much more frequent occurrence in the female than in the male. This might be expected from the manner in which the various parts of the sexual organs in the female are related to it, the uterus projecting partially into the cavity and the Fallopian tubes opening into it.

Prolapse of Rectum.—More common in women than men.

Purulent Inflammation of Biliary Passages.—All of these, and especially those of the gall bladder, will more frequently develop in the female than in the male sex.

Softening of the Esophagus.—All of the cases reported were men.

Disease of Spleen.—The male is more frequently affected than the female, at a ratio of 3:1. Leucocythemia occurs in males in the proportion of 2:1.

Twisting of the Sigmoid Flexure.—More frequent in males. Lichtenstein gives the ratio at 27:10.

Typhlitis and Perityphlitis.—Inflammatory conditions of the right iliac fossa occur more frequently in males than females. Bamberger found the ratio to be 26:4. The ratio of typhlitis is 8:2.

The next class of this order is Urinary; here the female sex has a great advantage over the male.

Addison's Disease.—This is more common in men. Merkel says all his cases were males. Averbeck has placed the proportion at 1.74:1.

Calculus in Bladder.—Excess of males, great proportion, 23:1.

Cystitis.—Men more liable than women to vesical catarrh.

Diabetes.—*Diabetes mellitus* and *diabetes insipidus* are both more frequent in males, the ratio being 3:1. In diabetes insipidus, Roberts places the proportion at 55:22 and Von Ober Hujden at 71:25.

Hematuria.—Paroxysmal almost exclusively a disease of males. The same with what is called endemic.

Hydronephrosis of Kidney.—More frequent in females than males, because in that sex the ureters are liable to be narrowed in their calices, as the result of pathological conditions of the genital apparatus.

Lardaceous (waxy) Disease of Kidney.—More common in men than women.

MOVABLE KIDNEY.—Female sex particularly predisposed to this. Ebstin shows the ratio to be 82:14. Fritz, 30:9. The right kidney is the one usually displaced. The less frequent displacement of the left kidney is due to fact that the left hypochondrium, which is occupied by the spleen and fundus of the stomach, bears the pressure of tight lacing with greater impunity. Trousseau denies this; thinks the liver cannot press down to displace the kidney; the cause he thinks is relaxation and shocks with movements of the body.

Nephritis—Bright's Disease.—Both tubal and diffuse more common in males than females. This has been clearly shown by Dickinson. The male sex is more liable than the female to granular degeneration, the proportion being 2:1. Bright's disease in women is more common during child-bearing period. Interstitial inflammation, English writers say, is twice as common in men as in women, while Bartels puts it at 4:1.

Nephrolithiasis.—The male sex is far more liable to urinary calculi. In 5,497 cases, Oesterlein says only 307 cases were females. Neupauer reports only five per cent. females.

Nephro-Phthisis.—This is met oftener in men than in women, about the proportion of 2:1.

Perinephritis.—More frequent in men than in women; men are more liable to injury.

It will not be necessary to enumerate the order of generative diseases. In reference to this there can be no comparative proclivities, except so far as the aggregate is concerned. These diseases form but a small per cent. of the total mortality. Only fifty-two each year in New York city thus die out of a mortality of 26,976. Two-thirds of the diseases of the reproductive system are preventable. There is no truth in the saying that there is an unlimited tendency to disease of the sexual organs. It is the remains of the old idea that the menstrual discharge, if retained, was acrimonious and malignant; that it would affect even inanimate bodies. We had the same view in reference to the blood from hemorrhoids; but these fables have passed. Of

the number of diseases of the sexual system, but few are fatal. Taking the statistics of Hewitt's outside and hospital list, we find that out of 1,205 cases more than one-half are diseases of the uterus, and one-half of the latter number will be cases in which the shape of the urteus is materially altered or its position markedly changed; ten per cent. are general diseases, and forty per cent. are organic; and of this number over thirty-three are malignant.

Diseases of the osseous and integumentary system require no notice; the comparison would add no interest that would bear weight. Certain diseases are found of course in one and not in the other sex, from peculiarities in the anatomy, as for instance in the integumentary order we have *sycosis*, a disease only found in the male; while *epithelioma* is more frequent in the male, we find LUPUS more common in the female.

QUININE IN TYPHOID FEVER.

By J. A. Rafter, M. D., Holton, Kas.

ANY one familiar with the literature of typhoid fever, must be forcibly impressed by the difference of opinion expressed by the various text books, in regard to the remedial agents to be employed in the treatment of this moderately prevalent disease. So marked is this difference of opinion, I wish to call the attention of the profession to the subject, believing that a comparison of views and experiences may settle some disputed questions, and bring order out of the confusion that now seems to exist as to what therapeutical agent will best combat this disease.

There appear in the field two great parties, the one advocating in typhoid, as in all other fevers, that great panacea of all ills, that *anti* with many endings—sulphate of quinine. Opposing this remedy with considerable vigor

are many good practitioners. Both parties are backed by the sanction of high authorities. A few weeks ago, wishing to get an expression of the views of the representative practitioners in Kansas as to their experiences in treating typhoid fever with sulphate of quinine, I wrote to quite a number of reputable physicians, and have now received replies to all letters sent. On comparing the opinions given, I find as great a diversity as is expressed by authors and medical writers generally.

It is my purpose in this paper to consider as briefly as possible, and from a clinical stand-point, whether quinine has any curative properties in the treatment of typhoid fever. I am not now considering any but *uncomplicated cases* of typhoid fever, being well aware that if we have specifics quinine is one in treating all kinds of malarial poisoning. That quinine in large doses is a strong and certain antipyretic every one, so far as I know, is ready to admit. But when we consider the physiological action of the drug, and the chief sources of danger in typhoid fever, it would seem both from a theoretical and practical stand-point that quinine was the drug exactly contra-indicated. Small doses of quinine will not reduce temperature, and large ones do it at the expense of a weakened heart and feeble circulation. This it does in the face of the often repeated warning, *the first and greatest danger in typhoid is exhaustion and heart failure.* A laboring heart and embarrassed circulation will cause a reduction of temperature in any disease, I care not what. It will do the same, also, if a person is in perfect health. The effect of quinine on the nervous system is not less marked than upon the muscular tissues of the heart. It deranges and enfeebles nervous action. I have seen it cause delirium in a robust, healthy man when it was given in the same continuous, often repeated doses that are usually given in the second week of typhoid fever. I have seen it given, again and again, in large doses in all stages of the disease, and although the physiological action of the drug was

well marked, it did not in any way shorten the duration nor lessen the severity of the disease, but on the contrary I believe it added to the patients' danger, and certainly added much to their discomfort. If any one is inclined to doubt this statement, I suggest that for the benefit of science he make an example of himself. Let him take quinine as recommended by Liebermeister in his essay on typhoid fever, as it appears in Ziemssen's Cyclopedia: "Take," says that distinguished writer, "from twenty-two to forty-five grains within the space of half an hour, and repeat often enough to hold the temperature in check." If some stalwart professional brother will follow this teaching in his own case as readily as he would in that of his patients, I can assure him from personal experience that his optic and auditory apparatus will disinherit him, and the rest of his nervous system receive a shock not easily forgotten, and his patients vainly look for him at his appointed time. Such teaching from any high authority and in such a disease as typhoid fever, where the patient's life depends upon his vitality and strength, is unsafe, injudicious and unwise. These same remarks will apply equally well to the treatment recommended by Prof. Loomis, of New York, and Prof. Bartholow, of Philadelphia, but there is evidently an uncertainty in the mind of the latter gentleman, and quite a discrepancy in his teaching. For the benefit of those not possessing his excellent works, allow me to quote from his Materia Medica, of 1877, and while the quotation is fresh in the reader's mind, clinch it with a statement from his practice, of 1880. In his article on typhoid fever—Materia Medica, page 130: "Not only has this remedy (quinine) no influence over the course and duration of the disease, but its irritating effect upon the gastro-intestinal mucous membrane, and its influence exerted through the organic nervous system upon the heart and lungs, renders it positively injurious in large doses. As a rule, the dryness of the tongue, the diarrhea, the subsultus and the delirium of typhoid fever are increased by it."

Then follows in his practice the following, page 703: "To reduce the temperature in typhoid fever anti-pyretic doses of quinine are required—from twenty to forty grains; a decline of several degrees will be caused by a sufficient dose, and a less effect will not justify the employment of the remedy. It is a good plan to prescribe a scruple every four hours until a decided reduction of temperature takes place."

Prof. Loomis is a little more cautious in his statements, and suggests that, if necessary, we may give ten or twenty grains of powdered digitalis with the quinine in typhoid fever. What his object is in giving "thirty or forty grains of quinine within a period of two hours" to depress the heart's action, and digitalis at the same time to prevent this effect, is something not easily understood by ordinary practitioners, as he distinctly states in his work on fevers that digitalis diminishes the frequency of the pulse by increasing the power of the heart.

It is not my purpose to criticise those eminent teachers, but to point out the uncertainty that exists in the writings of the same authors in regard to giving quinine in typhoid fever. We have plenty of remedies that will as effectually control the temperature and, given in divided doses, will not prostrate the heart, as sedative doses of quinine will do. It is this very sedative action that should be seduously avoided in all long continued diseases.

Many good practitioners prescribe quinine in small doses as a tonic during convalescence from any of the acute diseases. That it possesses some tonic properties is probably to a certain extent true, though not necessarily on account of its bitterness, as many suppose; for aloes and colocynth are extremely bitter, and their tonic properties are small. All of the bitter vegetable tonics are tonic on account of their astringency, or act by contracting tissues. This quinine does not do; and according to many excellent observers it possesses no astringency. One practitioner writes me that he gives it for its supposed curative properties in healing the "involved patches," etc.

In all fevers absorption is extremely slow, and a more probable result would be that not being absorbed it would pass on through the intestinal tube itself, producing irritation, aggravating instead of relieving the trouble for which it was prescribed. As an antiseptic in typhoid fever it ranks much below many now in use. If an antiseptic is to be given, a direct one given in small doses is to be preferred.

DIGITALIS—ITS USES AND ABUSES.

By Wm. Nifong, M. D., Fredericktown, Mo.

[*Read before the S. E. Mo. Medical Association.*]

My object in selecting this article for our consideration was to ascertain if the profession of to-day is as much divided in relation to the action of this valuable remedy as our authors and professors of long ago. I will not say anything of the history of this article, further than to notice some of the purposes for which it has been used. It was first introduced as a remedy by Fuschino, in 1542, and in 1576 it was described by Lobelius. Nearly a century later Culpeper mentions its use by the Italians as a dressing for recent wounds; also he recommends it as a purgative, emetic and deobstruent, and as having cured divers diseases. In 1711 William Solomon, a quack doctor, extolled its virtues in consumption, affirming of it all that is usually said at the present day by the venders of specifics for incurable diseases; and many others claimed wonderful cures for it, but not until 1775 did it claim a determinate position in the materia medica. Then it was the principal ingredient in a family recipe for the cure of dropsy, which induced Withering to give it a trial. For this disease it ranks among the best remedies we have at the present day. And in this, as in many other cases,

science was the adopter and not the discoverer of its properties.

We will next consider its early uses by many of the ablest physicians in their time.

In inflammatory diseases Ferriar said that it was a substitute for the lancet, evidently believing that it had sedative properties. Nor was the confidence of Currier less in its powers, for he used it in inflammation of the brain, heart and lungs. Mossman claimed that pneumonic inflammation may be obviated by it, with as much certainty as the progress of intermittent fever is arrested with Peruvian bark. It has been used in bleedings from the nose, uterus and stomach with supposed success. It has been used in all pectoral affections, asthma, angina pectoris and dyspnea generally. Drake spoke of it in hemorrhage from the lungs as a valuable remedy with the intelligent, claiming that many cases of phthisis have been cured by its use, and almost all have been relieved; that life had been protracted by it, and when death took place, whilst the system was under its influence, it had been free from pain or struggle. The celebrated Beddoes, in an essay on consumption, makes use of the following emphatic language: "I daily see many patients in pulmonary consumption advancing towards recovery with so firm a pace, that I hope consumption will henceforward be as regularly cured by foxglove as ague by Peruvian bark. Could we obtain a single auxiliary to foxglove, such as we have in many instances for the bark, I should expect that not one case in five would terminate as ninety-nine in the hundred have hitherto terminated. But I believe a majority of cases will yield to foxglove alone, and it is evident that no new cases need be suffered to advance beyond the first stage, with the application of this medicine, and few into it." Chapman, in giving the result of his own experience, claims that it is suited to the early stage of consumption only, which I believe to be a mistaken idea. If of any service at all, I believe it is in the last stage, when the heart power is failing,

when possibly by its use life may be prolonged. Stillé and Maisch say that the only inflammatory affection in which it may be used advantageously is chronic bronchitis with profuse secretion. I have tried it on three occasions in this disease, and found no benefit from its use; and I believe that there is no kind of inflammation in which it would be beneficial. As to hemostatic properties, it has none, or at least, after repeated trials, I have failed to derive any benefit from it in that direction.

In my opinion the heart lesions that are most favorably influenced by digitalis are dilatation, slight muscular degeneration, mitral obstruction, insufficiency, or want of power; by its use the supply of blood to the heart itself is increased, its nutrition improved, the irregular heart is rendered rhythmical in its movements, and tonic contractility is given to the muscles. The diastolic pauses are lengthened, and an increased force of the the systolic contractions causes the ventricles to fill themselves in the one and to empty themselves completely in the other act, and increases arterial tension all over the body. It is useful in most all forms of heart trouble, except in simple hypertrophy, where I believe it is contra-indicated.

I now call to mind a case of dilatation of the ventricle in which digitalis was used for eleven years, the patient affirming that she could not live without it, and giving it the name of heart drops, taking as much as fifteen drops of the tincture every three or four hours until relieved, sometimes being relieved by one dose, at other times taking as much as 3j in twelve to fifteen hours, always claiming relief from it; and so great was her confidence in it, that in prescribing other remedies for her she would frequently suggest the addition of digitalis. I must confess that her imagination had a great deal to do with its action. Still I firmly believe by the use of it her life was prolonged for several years.

As a remedy in dropsy, the result of heart disease or not, I believe it to be one of the best remedies we have, and to

Withering is due the honor of using it in this disease years ago; he used it in ascites and anasarca, and said as far as the removal of the water will contribute to the cure of the patients it will cure them. Fothergill claims that the increased flow of urine which it produces is really an evidence of its effect on the circulation, a statement which, from observation, I believe to be correct, although Stillé and Maisch assert that it does not give a real increase of power to the heart, and that it is totally devoid of all diuretic properties.

I will now relate a case in practice which confirms my belief in its heart-tonic and diuretic properties.

Mr. B., a carpenter by trade, age about 40, having been troubled for years with palpitation, went to work in a malarious district in the month of Sept., 1880; and in about three weeks had a chill. He came back to his home, which was a healthy locality. In two weeks after his return he sent word to me to send him some medicine, saying that his feet and hands were swelling. I sent the medicine and in five days after I was called to see him. He had received no relief from the medicine he had been taking. Upon examination I diagnosed what I believed to be a dilatation of the right ventricle; the pulse was small, feeble, and irregular; urine scanty, slight or no febrile symptoms, legs very much swollen, also the abdomen, so much so that respiration was interrupted.

The bowels being previously moved with compound cathartic pills, I gave him six drops of tincture of digitalis every four hours. On my return, two days later, I found the swelling but little reduced, a marked change in the pulse as to regularity and force, and an increased flow of urine, very perceptible to the patient.

I continued the digitalis and ordered twenty drops of dialyzed iron three times a day, and sulphur to keep the bowels loose. Two days later I found the swelling reduced but little, the patient claiming that there was nearly double the quantity of water passed that had been, also that he had not had any palpitation, neither had he discovered any intermission in the pulse. He wanted to be tapped. This was done and quite a quantity of water was taken away. I ordered the remedies continued as before. I never saw the patient any more until he was able to ride to town, which was about eleven days after paracentesis was performed.

The question might be asked here, Did the digitalis effect the cure? While I am willing to admit that the iron was needed and the sulphur was a good laxative and diaphoretic, and the tapping insured a more speedy recovery; yet the digitalis, by its action on the cardiac ganglia, excited a more perfect contraction of the heart itself, thereby increasing its nutrition, the blood being forced through the arteries, and especially the renal gland cells, which are supplied with the proper kind and quantity of blood, making the circulation free, and the result was diuresis.

We will now consider its application in fevers. I have seen it prescribed by men whose discretionary powers were superior to mine, and for whose opinions I have great respect; yet, as to its application in various forms of fever as a sedative, I shall beg leave to differ from them, on the ground that the only form of fever in which digitalis is indicated is the adynamic, where the pulse indicates a want of heart power. It is only in this form, and only under the circumstances mentioned, that it is at all admissible.

And now, wherever there is evidence of failure of heart power, either in pneumonia, typhoid fever, or remittent fever, in my opinion digitalis is indicated, not that it can have any effect on the disease itself, but it may help to sustain the heart during a crisis.

Local Anesthetics.—The following formulæ may be found serviceable as local anesthetics for small operations:

℞ Chloral hydrat., gum camphor, - aa ʒij.
Morphiæ sulph. - - - ʒss.
Chloroform - - - ʒj.

M. This may be painted with a camel's hair brush over the area to be incised; allowed to dry and repeated as necessary to render the part insensible. Prof. Redier proposes the following:

℞. Etheris aut chloroform, - - ʒij.
Camphor, - - - ʒi.

M. Apply with a brush.

℞. Acidi acetici (cryst.) one part;
Chloroform 20 parts.

Solve. Apply with a brush.—*Med. News*, Feb. 10, '83.

CASES FROM PRACTICE.

FRACTURE OF CERVICAL VERTEBRÆ (ONE OR MORE)—GOOD RECOVERY.

BY F. R. FRY, M. D., ST. LOUIS.

I first saw the patient, Mary C——, healthy child, 9 years old, of Italian parentage, October 15th, 1880. Soon after this date, by the request of Dr. Jno. T. Hodgen, I obtained the following previous history from Dr. Castle (deceased), and from members of the family:

On the 8th or 10th day of August (about two months before I saw the case), she fell down stairs and hurt her neck. She did not complain much for two days, at which time a lump was first noticed to left side of spinous processes of the fourth and fifth cervical vertebræ. She continually complained of her neck up to the time of first seeing Dr. Castle, at his office, which was about four weeks after the accident. Over two weeks ago (that is previous to Oct. 15th, '80), while playing with her brother, she fell from a chair. She immediately took to bed, complaining much and dreading to be moved. At this time the lump on the neck changed its position to one directly over the spines of the fourth and fifth vertebræ. She was seen soon after by Dr. Castle, who observed symptoms of approaching paralysis. These rapidly multiplied until, for the last two days, she has been unable to move any of her extremities.

The above brings the case to the time when I first saw it. Her condition then was as follows: Tumor in the neck as above described, of even contour, slightly red, about size of hen's egg, quite painful when touched. Head flexed and turned to left side. She complained much when the head was moved or when the bed was jarred; complete paralysis of all the extremities, only slight difficulty in breathing, bowels constipated, catheter used to empty bladder; restless, not sleeping well at night.

Before I saw her Doctors Hodgen and Castle had obtained an apparatus to support the head, and partially prepared to apply it, but never did so.

Oct. 25th. Seems better, eats and sleeps better, bowels less constipated, passes her water without use of catheter. Tumor not so tender and seems smaller.

Nov. 12th. Has constantly but very gradually improved since last notes.

Feb. 14th, 1881. She can perform a few limited movements with her left arm, forearm and hand, and the slightest possible with the right hand.

At this time I first remarked a very interesting phenomenon; what the members of the family called "stretching;" where any portion of one of the extremities was tapped or pinched, or sometimes even touched, a general tonic or tetanoid contraction very gradually seized all (?) the extensor muscles, making the limb perfectly stiff, so that it could not be bent with all the force that could be safely applied. The contraction always disappeared in the same gradual manner of its onset. After a spasm (?) of this kind it was always some time before another similar one could be excited. Frequently the same kind of a spasm would appear in one, two, or even all the extremities without an apparent exciting cause; and although entirely involuntary, resembled "stretching." She said she felt better after them, except when they came too hard, then they pained her and she would call to have her limbs rubbed. There was more or less of this condition all through the course of the case until she began to walk about. There was never any clonic action of the muscles that I observed until they began to react normally to the electric current and other stimuli.

March 18th. She has steadily improved, has considerable use of both upper extremities, more of the right; moves both the lower extremities, especially the legs, right more than left. General appearance much better.

June 1st. About this time she began to fail rapidly. Paralysis again became complete in all the extremities, accompanied by a great amount of atrophy in all the muscles; until her limbs appeared to be little more than skin and bones. There were persisting contractures of the flexor muscles of both forearms with the accompanying characteristic deformity of the hands. Bed-sores made their appearance, and for a while were very troublesome. The tumor on the neck became larger again and tender. Breathing became very difficult. At times, the respi-

ratory muscles of the right side hardly acted at all. She suffered a great deal during the hot weather of July and August, better one week and worse the next. Several times the breathing was so bad that we expected she would die any hour. She took a good deal of nourishment most of the time, and there was but little trouble with the bowels and bladder at this time.

Towards the last of the summer she began gradually to improve, then rapidly. In the fall she was walking about on crutches. She improved all winter steadily. In the spring she was running about as lively as any of her playmates, with perfect use of all her extremities, and has now a stout healthy appearance. There is a deformity in the neck slightly approaching the popular representation in the text books of a lateral dislocation of the fifth cervical vertebra.

The treatment was little. The condition of the bowels and bladder and the bed-sores were carefully looked after. As the history will suggest, she lay in bed much of the time; both then and when she was able to sit up, I attempted to make slight extension and to support and hold the head with fixed appliances, but for sufficient and insufficient reasons that I won't take the space to explain here, all such attempts were finally abandoned. I am certain that no appliance helped to accomplish the fortunate result.

The above is condensed as much as practicable, perhaps too much, from rather voluminous notes, extending over a considerable space of time; and certain interesting points, as for example, regarding the exact character and site of the injury, and the procession and recession of the paralysis, its cause, etc., have been avoided. But if any reader is especially interested in any phase of the case, I shall take pleasure in furnishing him such additional data as I can.

701 Washington Ave.

ANEURISM OF PALMAR ARCH.

BY E. VON QUART, M. D., MALDEN, MO.

J. H., occupation farmer, came to me February 10th, with a palmar abscess which I opened freely, and directed antiseptic poultices. Patient lived five miles from here and I lost track

of him for a month. He then returned with another physician, who stated that patient had had repeated attacks of hemorrhage from his hand. On close examination I found that this doctor had tampered with it with his pocket knife and probably punctured a vessel of the palmar arch, and a small pulsating tumor, of the size of a hazel nut, was discovered. I used a compress that day, and ordered patient to return in two days to be operated on. He did not come back until a week after, had compress removed, and stated that the hand had bled again. I now found that by compressing the radial artery the tumor ceased to pulsate. I ligated the radial artery, bandaged the hand and discharged the patient. He returned in an hour, his hand bleeding copiously, enormously swollen, and as it was night I compressed the radial artery, applied an Esmarch bandage, gave him an opiate and put him to bed in my office. I tried then to diminish the swelling by Esmarch bandage, and two days later I operated on him with the assistance of Drs. Van Meter and Crawford. I found the tumor now of the size of a walnut at an inosculation of the superficial and deep palmar arch; compressed the radial and ulnar artery, by acupressure; applied a circular ligature around the aneurism, and Monsel's solution to the sac. In forty-eight hours I removed the pins; found collateral circulation complete; the swelling was diminishing; pus discharged from wound. Applied carbolic acid dressing, removed the ligature around the aneurism on the third day and sent the patient home. The sac gradually decreased in size and separated in two or three weeks. The wound healed by granulation, and patient has attended to his farm for the last two months.

Tri-State Medical Society.—The ninth annual meeting of the Tri-State Medical Association will be held in Indianapolis, Sept. 18th, 19th and 20th. The work is already far advanced, and the title of each paper should be sent in at once. Papers must not exceed twenty-five minutes. It is also the rule that each physician who registers must be a member of a local or state society in good repute. All such are invited. Notice of papers or cases to be presented may be sent to the chairman of the committee on programme, Dr. J. L. Thompson, Indianapolis; or the secretary, Dr. G. W. Burton, Mitchell, Ind.; or to the president, Dr. Wm. Porter, St. Louis.

EDITORIAL.

THE CODE OF ETHICS.

We speak for ourselves; and we believe that we truly represent the vast majority of the medical profession throughout the West and South, when we say: We stand by the Code of Ethics of the American Medical Association. We believe that the principles inculcated in the Code are true, and therefore will endure.

We regard the position of the New York State Medical Society in this matter as subversive of the best interests of the profession, and hope that better councils will prevail, and that the profession of the Empire State will soon stand united with their brothers of the whole country in efforts for the advancement of the common weal.

TRACHEOTOMY AND LARYNGECTOMY FOR MALIGNANT DISEASE OF THE LARYNX.

Laryngectomy or extirpation of the larynx was first performed by Billroth, in 1873. The operation was performed for a malignant disease of the larynx. The patient survived the operation, and died seven months later. The disease returned in four months.

Since 1873, the operation has been performed sixty-five times according to a statistical report lately published by Dr. J. Solis Cohen (Transactions of Philadelphia College of Physicians and Surgeons). To this must be added a case operated upon in 1881 by the late Dr. Hodgen, the patient dying four

days after operation. The sixty-five cases reported by Dr. Cohen included fifty-six of carcinoma, five of sarcoma, and four of non-malignant disease. Of the five cases of sarcoma, one case, a man of twenty-four years (Bottoni), is still alive and capable of working six years after the operation.

Casselli's case, a girl of nineteen, in which he removed the larynx, the pharynx, the palate, base of the tongue, the tonsils, and a portion of the esophagus, remains still alive two years after the operation. The remaining three cases lived respectively seventeen, fifteen and seven months after the removal of the larynx.

The statistics of the operation for malignant disease of the larynx are very gloomy—forty-two of the fifty-six cases operated upon have died, or there has been a recurrence of the disease. The longest period of life after the operation was fifteen months, the great majority surviving less than one month. Forty per cent. of the cases died within eight days, and eighty-seven per cent. within six months after operation. Fourteen cases of malignant disease are believed to be still living at the present date—one has survived two years, and thirteen from five days to nineteen months.

The dangers of the operation are mainly from pneumonia, shock, exhaustion, or a recurrence of the disease. None have died on the table, and if they survive two weeks the danger from pneumonia is almost passed. Recurrence is most common from the fourth to the ninth month. Pulmonary phthisis or tuberculosis, putrid bronchitis, pleurisy and pericarditis have proved fatal in many cases.

With these statistics on hand, we are almost able to form a fair estimate of the true value and the justifiability of the operation in disease of the larynx. The statistics, like many other surgical statistics, are silent on a very important matter. The fact that the patient lives a certain number of years or months is valuable, but a very important fact is not stated in

the large majority of the cases reported, i. e., the actual condition of the patient in regard to comfort and usefulness. Is the prolonged life preferable to death? In one case, a case of sarcoma, who lived seven months after the operation, the condition of the patient was such that death was far preferable to life.

In estimating the operation at its proper value, it is also necessary to consider whether it really prolonged life. It is necessary to consider whether the adoption of other and less radical measures does not give as favorable or even more favorable results.

Fauvel, in estimating the value of tracheotomy in malignant disease of the larynx, gives the following interesting data, derived from a study of thirty-seven cases: The average duration of life in cases of encephaloid cancer of the larynx without surgical interference was three years and nine months, in cases of epithelioma four years.

Cohen has noted five cases of his own in which tracheotomy has been performed, and gives the following duration of life: One case, six months; two cases, seven months; one case, thirteen months, and one eighteen months. Dr. H. H. Mudd, of this city, has performed tracheotomy for malignant disease in two cases. He states that marked relief was given by the operation—that in one case of advanced malignant disease the patient was comparatively comfortable for six months—in another the patient was still alive and in a better condition than before the operation eighteen months after the operation.

Taking Fauvel's statistics, we find that when tracheotomy has been performed life is lengthened in cases of encephaloid about nine months; in cases of epithelioma about two years. Cohen notes that the most unfavorable of his cases lived six months after the operation, the others varying from seven to eighteen months. Dr. Mudd's case was alive and comfortable eighteen months after tracheotomy.

We thus see in the most unfavorable cases six months extension of life; in the more favorable ones nine months and two years. Comparing these statistics with the results of laryngectomy, where eighty-seven per cent. of all cases operated upon died within six months, and only one lived two years, tracheotomy has certainly given the best results in prolonging life in the greatest number of cases. As far as we can learn from the records, the life of the patient after tracheotomy has been comparatively comfortable, which cannot be said of many cases of laryngectomy.

Comparing the two operations, the verdict must be in favor of tracheotomy in cases of malignant disease. It is in itself a trivial operation, the patient soon recovers, and may live in comparative comfort. When the mechanical obstruction of the growth interferes with deglutition he may still be fed with the tube, or life may be prolonged by rectal alimentation. Experience has shown that the performance of tracheotomy tends to diminish this mechanical obstruction, by retarding the growth of the tumor and diminishing the tumefaction.

Laryngectomy, on the contrary, is a radical operation, causing intense shock, and requiring months for the recovery from the operation. When this has taken place, and he has run the gauntlet of the many accidental complications, his condition is often a pitiable one.

In cases of sarcoma extirpation may be justifiable when the patient is young and robust—the two successful ones have both been under twenty-five years—but when middle age has been reached cases of sarcoma, like all cases of carcinoma, should be given the benefit of tracheotomy rather than laryngectomy. G.

Cleveland is one of the most beautiful cities in the United States, but lacks hotel accommodations for such a crowd as were present at the recent meeting of the American Medical Association.

BOOK REVIEWS AND NOTICES.

A GUIDE TO THERAPEUTICS AND MATERIA MEDICA. BY ROBERT FARQUHARSON, M. D., Edin., etc. Third American edition, revised by the author. Enlarged and adapted to the U. S. Pharmacopeia by FRANK WOODBURY, M. D., etc. *Philadelphia: Henry C. Lea's Son & Co.*, 1883. 12 mo., pp. 526; cloth. (St. Louis: J. H. Chambers & Co).

One of the most notable features of the present day in the medical world is the increased care and attention that is now paid to the study of the materia medica, and the proper selection and adaptation of remedies to the various morbid conditions that present to the notice of the practitioner.

This work of Dr. Farquharson's, of which the third edition now lies before us, is a valuable contribution to this form of work.

Following the introduction, in which are discussed "The Routes by which Medicines enter the System," "General Rules for Prescribing," etc., the work is divided into three sections. In the first are contained "Remarks on certain Classes of Remedies;" in the second are considered "Remedies comprised in the Primary List of the U. S. P. and their Preparations;" in the third are given "Remedies in Frequent Use, but not included in the Primary List U. S. P," while in the Appendix are contained notes with reference to poisons and the treatment of poisoning; Tables of Weights and Measures, etc.

In discussing the various remedies the physiological and therapeutical actions are given in parallel columns for comparative study.

This volume is one of great value to students and practitioners.

THE MICROSCOPE AND ITS REVELATIONS. BY WILLIAM B. CARPENTER, C. B., M. D., LL. D., etc. Sixth Edition. Illustrated by twenty-six plates and five hundred wood engravings. Vols. I. and II. *New York: William Wood & Co.*, 1883. 8vo., cloth. (Wood's Library.)

No words of ours are needed in commendation of this invaluable work on the use of the microscope, which has been intro-

duced into the "library of standard medical authors," forming the April and May volumes. While the volumes are not addressed specially to physicians, there is no class of men to whom a thorough practical knowledge of work with the microscope is of more value or interest. Therefore it seems an eminently appropriate selection for the library.

A MANUAL OF AUSCULTATION; embracing the physical diagnosis of diseases of the lungs and heart and of thoracic aneurism. BY AUSTIN FLINT, M. D., etc. Third Edition, Revised. *Philadelphia: Henry C. Lea's Son & Co.*, 1883. 16mo., pp. 242, cloth. (St. Louis: J. H. Chambers & Co.)

This little volume having reached a third edition in so short a time is one of the best and most serviceable manuals that can be placed in the hands of student or practitioner. It is thoroughly practical and helpful.

THE DISEASES OF WOMEN: A manual for physicians and students. BY HEINRICH FRITSCH, M. D., etc. Translated by ISIDOR FURST. With 159 wood engravings. *New York: William Wood & Co.*, 1883. 8vo.; pp. 353; cloth. (Wood's Library.)

To the worker in any special department it is a matter of interest and value to know the methods of practice adopted in other countries than his own. For this reason gynecologists and general practitioners (for most general practitioners do more or less gynecological practice) will be interested in this volume from the hand of Dr. Fritsch, which contains a clear, concise, and thoroughly practical exposition of the methods of treatment adopted by German practitioners. In some respects this treatment is essentially different from that commonly recommended in this country, and it may be that most of us will still prefer the American methods. We note, however, one point which we think an important one, and that is the stress laid upon the value of general constitutional treatment. There can hardly be a doubt that the tendency of American gynecology is to exaggerate unduly the importance of local treatment to the neglect of the other.

A SYSTEM OF HUMAN ANATOMY, including its Medical and Surgical Relations, by HARRISON ALLEN, M. D., etc., etc. Sec. III., Muscles and Fasciæ. *Philadelphia: Henry C. Lea's Son & Co.*, 1883. (St. Louis: J. H. Chambers & Co.)

This third fasciculus of Dr. Allen's anatomy is in many respects a decided improvement upon the second one, which

treated of the bones and joints. The whole volume bears marks of careful and diligent study. In no one work can be found so much information with regard to the matter of variations in the muscles. While there are some omissions of important details, as to the extent of origin and insertion of certain muscles, for instance, and there is room for difference of opinion in regard to some points of surgical import which he makes, this fasciculus is on the whole quite a satisfactory one. The cuts showing the anatomy of hernia are miserable, but the descriptions are clear and good.

Therapeutic Handbook of the United States Pharmacopeia. By Robert T. Edes, A.B , M.D., etc. *New York: William Wood & Co.* 1883. 8vo., pp. 397; cloth. (St. Louis: H. R. Hildreth Printing Co.; J. H. Chambers & Co.)

In this volume Dr. Edes has given a serviceable book of reference, much more easily handled than a dispensatory and containing simply the therapeutical directions with reference to the articles contained in the pharmacopeia. It is a volume which promises to come into very general use and is one to be thoroughly commended.

An Index of the Practice of Medicine. By Wesley M. Carpenter, M. D. *New York: William Wood & Co.* 1883. 16mo.; pp. 304, interleaved.

This little volume is a very excellent one of the kind, but is not a sort of work that is calculated to promote the best interests of the profession. It is a model of condensation, and if a man needs to carry with him an epitome of medical practice he cannot secure a better one, certainly not one more elegantly prepared than this of Dr. Carpenter.

The Pathology and Treatment of Diseases of the Ovaries. By Lawson Tait, F.R.C.S., Edin. and Eng., etc. Fourth edition, rewritten and greatly enlarged. *New York: William Wood & Co.* 1883. 8vo.; pp. 357; cloth. (St. Louis: H. R. Hildreth Printing Co. and J. H. Chambers & Co.)

While the views of this author are in some respects different from those which are generally accepted by the gynecologists of this country, he is nevertheless recognized as a leader in the department of surgical gynecology, and no one can afford to be ignorant as to what his views of pathology and treatment are, whether they are approved or the contrary. Certainly one who has done the amount of work in this department that Lawson

Tait has done, and who can express his observations and experience as clearly and forcibly as he does, must exert a decided influence upon other workers in the same department. This fourth edition is not in any material respect different from the previous ones, but is somewhat enlarged to take account of the author's more recent experience.

Lectures on Medical Nursing, delivered in the Royal Infirmary, Glasgow, by J. Wallace Anderson, M. D., etc. Second edition. *New York: Macmillan & Co.* 1883. 16mo., pp. 224; cloth. (Through the Hugh R. Hildreth Printing Co.)

This little volume contains many hints that will be of service to those who aim to qualify themselves thoroughly as nurses for the sick. The importance of skilled nursing is more fully appreciated now than ever before, and while thorough training in hospital training schools is unquestionably the best preparation for the work, much valuable help can be obtained from such a work as that in hand. One feature that is somewhat novel is the placing of questions at the end of each chapter by means of which the reader or nurse can examine herself with regard to the contents of the chapter.

Handbook of the Diagnosis and Treatment of Diseases of the Throat, Nose, and Naso-pharynx. By Carl Seiler, M. D. Second edition. Thoroughly revised and greatly enlarged. *Philadelphia: Henry C. Lea's Son & Co.* 1883. 16mo., pp. 295; cloth. (St. Louis: H. R. Hildreth, J. H. Chambers & Co.)

This is the second edition of this book issued in 1879, by the author. The popularity of the work has induced the author to reissue it with certain additions, which greatly enhance its value as a text book. This is especially true of the chapters relating to diseases of the nasal cavities. It is a pity that the writer still persists in retaining the unsatisfactory and unscientific name "nasal catarrh," which, in the present state of knowledge of the pathology of the nasal cavities is simply a general name for a variety of pathological conditions. His chapters on hypertrophic changes in the nasal and post-nasal membrane are fresh and embrace fully the latest pathology and treatment of this serious condition. We can cordially commend this edition to those who desire a knowledge of the diseases of the throat and nose.

BOOKS AND PAMPHLETS RECEIVED.

The Principles and Practice of Medical Jurisprudence. By the late Alfred Swaine Taylor, M. D., F.R.S. Third edition, edited by Thomas Stevenson, M. D., London, etc. Vols. I. and II. Philadelphia: Henry C. Lea's Son & Co., 1883; 8vo., pp. 727—657, cloth. (St. Louis, J. H. Chambers & Co.)——Handbook of Electro-Therapeutics. By Dr. Wilhelm Erb. Translated by L. Putzel, M. D. With thirty-nine wood cuts. New York: William Wood & Company, 1883. 8vo., pp. 366; cloth. (Wood's Library.) (Through the Hugh R. Hildreth Printing Co.)——Handbook for Hospitals. No. 32 State Charities' Aid Association. New York: G. P. Putnam's Sons. 16mo., pp. 263; cloth, $1.00.——Impotence, Sterility and Allied Disorders of the Male Sexual Organs. By Samuel W. Gross, M. D., etc. Second edition, thoroughly revised, with sixteen illustrations. Philadelphia: Henry C. Lea's Son & Co., 1883; 8vo., pp. 176; cloth.——The Microscope and its Revelations. By Wm. B. Carpenter, C. B,, M. D., etc. Sixth edition, illustrated by twenty-six plates and five hundred wood engravings. Vol. II. New York: William Wood & Co., 1883. 8vo., pp. 354. (Wood's Library.) (Through Hugh R. Hildreth Printing Co.)——Malarial Poisoning the cause of Hematuria. By W. O'Daniel, A. M., M. D., Bullards, Ga. Reprint from Transactions of the Medical Association of Georgia.——Announcement of the third Annual Session of the Medical Department of the University of Denver, Denver, Colo. Collegiate year 1883–'84.—Annual Announcement of Trinity Medical School, Toronto. Session of 1883–4.——Fourth Annual Announcement and Catalogue of the Northwestern Medical College of St. Joseph, Mo. Session of 1883-4. ——A Bit of Obstetrical Experience. By H. V. Sweringen, M. D., Ft. Wayne, Ind. Reprint from Obstetrical Gazette, April, 1883.——Treatment of Retained Placenta after Abortion. By H. Von Sweringen, M. D., Fort Wayne, Ind. Reprint from Obstetrical Gazette, June, 1883.——A Treatise on Therapeutics, comprising materia medica and toxicology. By H. C. Wood, M. D., etc. Fifth edition, revised and enlarged. Philadelphia: J. B. Lippincott & Co., 1883. 8vo., pp. 740; cloth, $6.00.——A Treatise on Insanity. By Wm. A. Hammond, M. D., etc. New York: D. Appleton & Co. 8vo., pp. 767; cloth.——Second Annual Announcement and Catalogue of the Woman's Medical College of Baltimore, Md., 1883–84.——Thirty-seventh Annual Announcement of Sterling Medical College, Columbus, Ohio.——The Untoward Effects of Drugs, a Pharmacological and Clinical Manual. By Dr. L. Lewin. Second edition, revised and enlarged. Translated by J. J. Mulheron, M. D., etc. Detroit: George S. Davis, M. D., publisher, 1883. 8vo., pp. 216; cloth, $2. ——Announcement of the Baltimore Medical College, Baltimore, Md. 1883-84.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, May 24th, 1883.

Removal of Secundines after Abortion.

Dr. Boislinierè.—I believe I am a little behind the times. I trust a good deal in the removal of the secundines to the power of nature. There is a very excellent rule given in Meadow's valuable work, when the placenta cannot be easily removed, to leave it alone. I think in the cases that Dr. Whitehead reports, and to which Dr. Coles has referred in his former paper on abortion, written some years since, that out of 600 cases of abortion it occurred at the third month in 275, nearly one half. When the uterus has already attained a certain degree of growth, so that after the delivery of the fetus the cervix is of moderate size, it frequently will allow of the introduction of the finger into the uterus, and the removal of the placenta may be effected in this way. Especially is this method advocated by the French and German writers. Sometimes, also, it is advised that we make strong supra-pubic compression of the uterus and squeeze the secundines out in that way. This is a very good method when there is a certain amount of dilatation of the cervix, but not when it takes place under the third month. If you do not succeed by these methods, and the uterus is closed upon the retained secundines, and the discharge becomes offensive, recourse must be had to intrauterine injections, warm water and disinfectants, in this way preventing secondary danger, such as septicemia. I belong to the conservative school, and I do not like to resort to the extreme measures that have been suggested. I sometimes resort to the method of expression, and scooping them out with the finger, but if that cannot be done I follow the advice of Meadows, and leave the secun-

dines in the cervix. If they are not easily reached after a time I would apply a tampon—a cervical tampon. I would use Sims' speculum, expose the cervix, and apply the tampon, applying iron to the surface. I would then tampon the vagina; this, acting as a foreign body, produces uterine tenesmus, by which means the contents will be expelled. The whole lining membrane of the uterus is in a state of hyperæmia, and there is danger that by scooping the decidua in searching for the attachment of the placenta, especially if the curette is a sharp one, you may produce a traumatism in the interior of the uterus, which may be followed by metritis and its consequences.

Dr. S. G. Moses.—Would you interfere if there was no hemorrhage or some other urgent cause?

Dr. Boisliniere.—If I don't find the placenta within reach I leave it for twelve hours at least; and if it is not delivered then I begin to grow anxious. I then use an injection, and wash out the uterus to prevent septicemia. Sometimes the placenta is adherent and is very difficult to detach, and the retained placenta may even develop into a sort of fleshy mass. I have a case at the hospital that I asked Dr. Moses to see with me, in a woman who had a miscarriage two months ago, at about two months, and the hemorrhage has continued ever since, more or less. I examined her the day before yesterday, and found protruding against the os a very solid mass, with a sort of pedicle; it was very firm; I finally dilated the cervix with tents, and by making a bilateral section got the foreign body away. This may happen, though it is probably very seldom the case.

Dr. S. G. Moses.—Do you think that was the result of the retention of the placenta?

Dr. Boisliniere.—I believe this may have resulted in that way. While the operation of removing the retained placenta with the aid of a curette may succeed with experienced obstetricians, it requires more experience than the ordinary physician has.

Dr. Ford.—In regard to the tumor of which you spoke, isn't it somewhat connected with the period of gestation at which abortion occurs, before the placenta becomes separable?

Dr. Boisliniere.—It may have developed during pregnancy, or even before pregnancy It may be simply a coincidence. It

was denied that the placenta had ever come away; but it may have come away in shreds. I would be afraid to use the curette. I have done it sometimes, with more or less success, but I generally had as a result a great deal of febrile action.

Dr. S. G. Moses.—This is not a new idea which has been advanced. I do not think it is right to use the amount of interference which is urged in Dr. Mundé's paper, whether there is hemorrhage or not. I have seen a great many cases of abortion, and I do not think I ever saw a death result from this cause; I am sure I haven't seen a death from the abortion alone where it occurred accidentally. I recollect one case where the abortion was due to a criminal attempt, in which the recovery of the patient was questionable for some time, but fortunately the woman got well; I had a good deal of trouble with the patient due to a consequent metritis. The hemorrhage is sometimes frightful, but this, as Dr. Coles says, is generally before the expulsion of the ovum. After the expulsion of the ovum, and the contraction of the uterus, we rarely have hemorrhage. I think we can very well afford to wait a few hours. I would avoid tamponing the womb unless there was some cause, and leave the matter to nature, watching the case, and using such means as we know have some influence in toning up the general system. I have been in the habit of using large doses of quinine under such circumstances. When I was attending physician at the Arsenal during the high water in 1844, when the whole Arsenal was filled with sick people, I was sent for to attend a woman who was suffering with intermittent fever, the wife of the hospital steward. She finally aborted and bled fearfully. She was in a fearful state, and as she had a chill, I put her on quinine—about three or four grains every couple of hours. In a short time the hemorrhage ceased, and the next morning the placenta was expelled readily. I did not give her any ergot. Since that time I have been in the habit of using quinine for this purpose.

But I have seen cases of continuous hemorrhage, where there was retention of the secundines where it was very necessary to have the uterus emptied. The curette may be safe enough in the hands of some practitioners, but it is certain that the sharp curette is unsafe in the hands of many. Dr. Dewees was called to see a case in which a woman had miscarried or abor-

ted, and the physician in attendance couldn't stop the hemorrhage. It had kept on for a week or ten days, a constant oozing. At the time Dr. Dewees was called, he suspected that the secundines had not been delivered, took a piece of wire, bent it into a sort of hook, and passing it into the uterus withdrew the secundines and relieved the symptoms. This induced him to make the little instrument which he recommends, and which is nothing more than the curette after all. I think the use of the curette for the purpose of removing the afterbirth immediately after labor, is very hazardous.

Dr. Boisliniere.—I am opposed to the immediate use of the curette for the removal of the placenta. In the menorrhagia that sometimes follows abortion, whether due to the placental villi that remain, or to a diseased condition of the decidual membrane which produces a constant oozing, I think it is well to use the curette. It is often effectual and safe where properly employed under such circumstances.

Dr. Ford.—What do you think of the use of the curette when there is retention, and yet no hemorrhage, in view of possible septic trouble?

Dr. Boisliniere.—If I know there is a retention of the placenta I wash out the uterus.

Dr. Coles.—You wouldn't wash out the uterus at once—not until you perceive symptoms of threatened sepsis?

Dr. Boisliniere.—No. When the discharge is offensive and the placenta has been only partially detached, then I would wash out the uterus. I use permanganate of potash, Listerine, and so on, and wash it out freely.

Dr. Ford.—Do you use the tampon?

Dr. Boisliniere.—No. There is no need of the tampon unless there is hemorrhage.

Dr. Ford.—Would not the tampon have the effect of stimulating the uterus to contract and throw off the afterbirth.

Dr. Boisliniere.—Yes, it would have that effect. Hot water injections might do good in that condition. I wouldn't use the curette at once in these cases; the instances in which it might be used are chronic cases of hemorrhage following abortion.

Dr. Barret.—I think, Mr. President, that a man who goes about scooping women's uteri because they have aborted, ought not to be allowed to carry a curette. On general prin-

ciples I am opposed to the use of any kind of mechanical contrivances for the purpose of removing the placenta. I believe the finger is the best and only instrument which is necessary. It tells us what we are doing, what we have not done, and what remains to be done; and it conveys to our minds exactly the information we need as to the amount of force that we are employing; none of this information can be gotten from the curette. It is insensible and does not communicate with the brain; it does not give us information of what we are doing; or whether the secundines are adherent to the uterus as a result of disease, and cannot be scraped off with the blunt curette. I think the dangers of allowing the placenta to remain in the uterus are exaggerated. I think there is no danger at all if the case is under intelligent observation. I should not be alarmed about a placenta remaining in the uterus twenty-four, thirty-six, or even forty-eight hours, if I had the patient under observation. I think the best plan to stop the hemorrhage is to place something in the neck of the uterus, a simple plug, a piece of sponge, and tampon the vagina, and then when the physician returns, say in about from twelve to twenty-four hours, the placenta will generally be found in the upper portion of the vagina, from whence it can readily be removed. There is a great deal of difficulty in removing the placenta in some cases after abortion, because it is so intimately connected with the uterus; but after the lapse of twenty-four or forty-eight hours its immediate connection with the uterus has begun to disintegrate, and the placenta comes away with perfect ease, when it was utterly impossible to separate it previously. The attending physician makes futile efforts to get the placenta away, and after a few days a consulting physician comes in and scoops it out and gets credit which does not belong to him, because nature has done the work.

If there was a putrid discharge from the uterus, and the pulse was getting rapid, the temperature running up, and the woman's head began to ache, it would be evident that septicemia was impending, and then I consider it imperative to remove the placenta by any reasonable means. In case I couldn't remove it I should keep the uterus clean by intrauterine washes and disinfectants. I think that where the placenta cannot be removed by any other means, and the symptoms of

septicemia are present, the physician is justified in placing the woman under chloroform and putting his hand into the vagina, if he cannot effect the removal with his fingers.

Dr. McPheeters.—I think Dr. Coles' paper is a very successful refutation of the doctrine that in all cases mechanical means should be resorted to for the purpose of getting rid of a retained placenta. There is danger, as he stated, of producing traumatism; of injuring the parts by the manipulations which are sometimes rude. It may sometimes be successfully performed, but inflammation is apt to be produced. The great danger is from inflammation of the womb. If there is hemorrhage I use ergot; if necessary, the tampon. Very often on the next day we find that the placenta has been expelled by the uterine contraction. If there is any threatening of inflammation, or of septic poisoning, I wash the uterus out with antiseptic washes, using warm injections; and if possible, I introduce my finger and separate the placenta and bring it away. I have an instrument for removing retained placenta, which I brought with me from Philadelphia when I first came to this city. I don't know whether it is Hodge's instrument or not. It is a pair of long forceps with a bevelled edge, and the center of the plate is serrated, so that in introducing it into the uterus and grasping the placenta you don't catch the sides of the womb. It is an instrument made for the purpose of removing these retained placentæ.

I think in all these cases the expectant treatment is the best plan. It is desirable to get rid of the placenta as soon as that can be done by mild means, and if there is inflammation or septicemia going on, you must get rid of the offensive matter as soon as possible. But to say that the placenta must be removed immediately in all cases is, I think, going too far. It may be that in the hands of Dr. Mundé and other experienced gynecologists the curette may be an efficient aid in these cases, but it will not do to recommend its use to young practitioners, and say that in all cases the curette must be resorted to in cases of abortion where there is retained placenta. If this were done we should have a great many more deaths than we now have in cases of abortion. I do not now remember to have lost a case through abortion. I have known cases that died from metritis and endometritis, sometimes from septi-

cemia, from the retention of the placenta, but such cases never occured in my practice. I think we are more apt to have these untoward events from unsuccessful and violent manipulations in the interior of the womb, than ordinarily by letting the case wait.

Dr. G. A. Moses.—I am satisfied that when Dr. Mundé reads the discussion of his treatment of retained placenta and hemorrhage from abortion, he will entirely change his opinion and practice. It seems to me probable that many of the cases to which he is called in consultation in New York, with men who become frightened, are such that by the time he is called in the placenta is in just the right condition to be expelled, as we often see, and all he has to do is to take hold of it and remove it; and the use of the curette in these cases, if he uses it, is improper. I recollect a case that I saw six or seven years ago, in which cellulitis and abscess was the result of a forcible extraction of the placenta after an abortion. The physician in charge was anxious about the hemorrhage, and determined after the fetus was cast off that he must deliver the placenta. He spent an hour or more, using his fingers chiefly, and some sort of an instrument, perhaps a curette. The result was that he produced a violent cellulitis, with a large pelvic abscess, which very nearly resulted in the death of the patient. Then there was a case, not of abortion, but of delivery nearly at term—if I recollect rightly at the seventh month. This was one of the very few cases of adherent placenta that I have seen. The placenta was partially detached at one edge. There was a great deal of hemorrhage which made me anxious, and I attempted to deliver it. I gave chloroform and introduced my hand into the vagina, and succeeded in getting away a large portion of the placenta. The forcible extraction of the placenta in the early months is, I think, a wrong rule. I am satisfied that, as a rule, we do better by watching the case closely and letting it alone. Of course under such circumstances as putrefaction, or persistent and prolonged hemorrhage, we must act differently; but as a general rule I am confident that we do better and are perfectly safe in letting the secundines alone.

Dr. Boisliniere.—It has been said that in some cases of retained placenta, if left in the uterus, degeneration takes place, and there is a mole formed.

Dr. McPheeters.—I think that is possible. I think I removed one of this character some years ago.

Dr. Boisliniere.—How long after the abortion did you remove it?

Dr. McPheeters.—I think it was over a year. There had been a good deal of hemorrhage which lasted for some time after the abortion, and the woman maintained that a portion of the placenta had been retained. She suffered a great deal of pain; had irregular menstruation. Upon examination I felt a mass within the uterus which I seized with a pair of forceps and dragged down somewhat, and passed an écraseur chain over it and removed it in that way. I showed the specimen to the society at the time. It was a mass as large as a goose egg—quite a considerable mass, organized, fleshy, but not of the consistency of a fibroid. The woman recovered perfect health and has borne children since; two, I think. I suppose that was the result of the degeneration of a portion of the placenta.

Dr. Boisliniere.—There are cases on record where on the delivery of a child at full term one of these moles has passed, which must have been the result of a previous abortion.

Dr. Ford.—Forming either a mole or a fibroid.

Dr. Boisliniere.—They don't look like fibroids.

Dr. Ford.—There is a distinction between them.

Dr. Barret.—I saw one that had been retained nine months. It was very firm. I had difficulty in getting it away with a sharp curette.

Dr. Boisliniere.—What size was it?

Dr. Barret.—About the size of a hen's egg.

Dr. Boisliniere.—This is a very interesting and practical subject; and it is one that is very perplexing at times.

Dr. Ford.—I would like to call attention to the fact that in the formation of a mole there is an indication that nutrition does not go on, and there is imminent danger of septicemia. Some writers seem to think there is no retention.

Dr. Boisliniere.—Wherever there is adhesion there is nutrition.

Dr. Barret.—As long as there is a connection there will be no septicemia.

Dr. Ford.—As long as there is vascular connection there will

be no putrefaction, and yet it seems that while it is being nourished it may pass on and be transformed into a mole.

Dr. Coles.—I merely want to say that the object of my paper was not to criticise any professional brother, but I wrote it for the reason that I honestly thought that the doctrines put forth by Drs. Mundé and Alloway are calculated to do a great deal of injury, and I deemed it important that we protest against that kind of teaching. Dr. Mundé goes on to say that almost any tyro in medicine can do this thing—that is to say, use the curette in the immediate and forcible delivery of the secundines. I desire to state that my object in writing the paper was not to make objection to anything new because it is new, but simply to say that I do not consider all the text-books behind the times. I consider that whatever is new in Dr. Mundé's paper is exceedingly dangerous, and I wrote my paper in order to enter my protest against it.

Protracted Gestation.

Dr. G. A. Moses.—I want to report a case of pregnancy which, counting from the last possible date of coition to the day of delivery, was 287 days precisely—that is two days beyond the longest limit recorded by American and English law of legitimacy.

Dr. Maughs.—The French law gives 300 days.

Dr. G. A. Moses.—The English law makes it 285 as a rule; this was 287. This was an unusually long pregnancy.

Dr. Gregory.—How many times had she been pregnant?

Dr. G. A. Moses.—This was the first one. I think this was an unusually long pregnancy. It was a large child.

Rectocele.

Dr. Prewitt.—A lady who was troubled with a tumor was sent to me with the expectation of being operated upon. On examination, I found that she was suffering from uterine fibroids, and concluded that nothing ought to be done in the way of a surgical operation. But I found that she also had rectocele. It projected out of the vulva, being quite a large bag, and began to ulcerate, so that she suffered with it a great deal, rendering her excessively uncomfortable, so that she was scarcely able to walk; and I concluded that something ought to be done with it, although there was no use in operating for

the uterine fibroids. In thinking over what would be the best thing to do, I concluded to get a rubber ball and also a Barnes' dilator, and I thought I could make either the one or the other answer the purpose, probably. So I bought a small rubber ball, and made a hole in it so that it could be emptied of air, and I also got a Barnes' dilator; but on my way home I lost the dilator, so that I had nothing left but the ball; but I found that it answered an admirable purpose in reducing the rectocele. I collapsed the ball flatwise, and pushed it down behind the perineum and introduced it, leaving the opening outwards so that it could fill with air, and by allowing it to expand I found that it answered admirably, making the patient perfectly comfortable, so that it didn't require any other support. She soon learned to introduce it herself, and went home very comfortable.

Dr. McPheeters.—How long did it take to fill?

Dr. Prewitt.—About half a minute.

Dr. Coles.—Didn't you find that the ball became very offensive in a short time?

Dr. Prewitt.—She can take it out and wash it as often as necessary. She takes it out at night, and introduces it in the morning. This lady has never borne any children, and the perineum is intact, and supports the ball very well.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, March 20, 1883—Dr. G. Baumgarten in the Chair.

Marital Excesses.

Dr. Nelson.—I was called to see a young married woman the other day and found that she was suffering from a condition of edema and soreness of the external genital organs, and on inquiring the cause she stated that she had been married a little over two years and there had not been a night during that whole time, when she was menstruating or not, but what her husband had had connection with her two and frequently three times or more. I said I supposed, of course, that during the last two or three days, since she had been suffering in this way,

they had not had connection; she said that they oughtn't to have had any connection, but they had. I concluded that the most important part of the treatment was to secure rest for the part, and I went and had an interview with the husband and tried to impress upon him the importance of the matter. He is remarkably well developed physically—he has a very good physique. There is no evidence whatever—no apparent evidence—of any nervous prostration, or neurasthenia, as it has been called lately. He is such a man as you would expect, from his appearance and general build, to have strong sexual passion; and certainly has no appearance of having exhausted himself by such excesses. I first treated this lady for an attack of extremely painful menstruation, and at that time she passed a membrane, with reference to which it was extremely difficult to determine whether it was a dysmenorrheal membrane or the product of an abortion, the fetus itself either having died and been absorbed or having been expelled without being discovered; and it was only after a careful miscroscopic examination, which Dr. Englemann kindly made for me, that it was determined that it was a dysmenorrheal membrane. That was two months and a half ago. At the last menstruation she suffered much less, and no large portion of membrane passed.

I took occasion to ask her in this connection, as I thought I had a fair opportunity of gaining further testimony in regard to a point which I have taken pains to investigate whenever the opportunity has offered, as to the extent to which the female sex partakes in sexual excitement; I asked her whether the cohabitation was always disagreeable or only the excess of it. She admitted at once that she was passionate herself, but said there were times when it was painful and when she would prefer to be allowed to rest in peace. This point is one in which I have taken considerable interest. My own impression has been that which is expressed by Acton in his work, and by a number of other physicians who I think have had excellent opportunity for observation, that the female does not share the pleasurable excitement—at least a considerable number of physicians and surgeons, who have had a large opportunity for observation and experience, are of the opinion that the female sex does not share the sexual excitement or passion—but that in the female sex it is dormant, and that it is

rather a willingness or desire on the part of the woman to gratify the desires of her husband, or of her friend, if it be illegitimate intercourse, rather than any desire for gratification on her part.

Dr. Todd.—It seems to me, Mr. President, this is an instance in which the study of organisms throughout the whole range of being ought to come into play. The idea that the human race exists alone, by itself, is radically wrong; that is utterly exploded. We know very well that the creatures below the men, the animals, will not receive the approaches of the male except at certain times, and those times are far apart. The female becomes pregnant, and after that the female will not allow the approach of the male at all; and the males have sense enough to keep away for awhile. There is no question at all that the human organism differs only in the excess of cerebral development from the animals immediately below. That is a physiological question and can only be solved physiologically, according to the circumstances, habits and general surroundings of the patient. But I don't believe it can be decided. In the first place we cannot get facts in the cases; that is impossible; and in the second place, in far advanced civilization, the conditions are so unnatural that so far as the habits are concerned there is no ground for observation. I don't doubt that women, as in the case just mentioned, are often abused by their husbands. Some time ago an eminent Englishman—a surgeon of London—traveled through this country and spent some time in Utah, and he came away rather well impressed with the condition of things there. He said the social evil was abolished and the wives were protected—there were enough to go around.

Dr. Baumgarten.—I think Dr. Todd is right. The female does not derive satisfaction from sexual intercourse at all times, but only at certain times.

Dr. Nelson.—Sexual pleasure in the female is certainly not necessary in order to cause procreation of the species. I know a family of remarkably healthy children—a large family, seven children—all of whom but one, which died in infancy from summer complaint when one year old, lived to mature manhood and womanhood, and I had it from the father of the family, who is a very intelligent man indeed, that his wife had

told him that she never had any pleasure in sexual intercourse at all, other than that of feeling that she was affording him pleasure. I know the same thing is true of the oldest daughter, a woman who has now borne four children; her husband has told me that she never manifested and didn't seem to have any enjoyment in sexual intercourse.

Dr. Carson.—Is it not usual for women who take little or no pleasure in sexual intercourse to be barren? Is it not unusual for them to bear children? I have seen three or four cases, and my experience has been that they are usually barren. One gentleman told me that his wife took no pleasure whatever in intercourse, and that she was willing, that she was perfectly willing, that he should go elsewhere rather than be subjected to what was disagreeable to her, and she is barren. He is a fine looking, well developed man. In another case there was an abortion, and in this case the husband told me that from the first there had been no evidence of pleasure or desire on her part for intercourse. There was no uterine difficulty in either of them. In one there was vaginismus developed later, but for several years after marriage nothing of the kind was present.

Dr. Baumgarten.—You do occasionally find cases of married men who find difficulty in satisfying the desires of their wives. I know of two such cases.

Dr. Leete.—In such cases isn't there marked nymphomania in the wives? These women I take it are like the husband which Dr. Nelson has spoken of, exceptional; and sooner or later, probably pretty soon, they will have to pay a terrible penalty for their excess. I have been consulted by two different parties on account of vexatious erection, which was a constant source of annoyance to them. Each had one or two children. In questioning them, to arrive at the facts, I learned that they were both grossly immoderate in their sexual indulgences, and didn't give their wives rest except during menstruation. They were both suffering manifestly in their health aside from this disagreeable condition. I told each of them that he was doing himself a great injustice, and that in due time, if he continued the practice, he would find that one leg lagged behind or an arm would fail to do its duty, or he would give some other evidence of approaching paralysis.

Dr. Carson.—I would like to ask Dr. Baumgarten if in the

case he spoke of the husband had not, prior to his marriage, led rather a dissipated life; indulging in excesses of all kinds, not only sexual but also tobacco smoking and liquors?

Dr. Baumgarten.—I remember one case in which certainly no such condition prevailed—in which the husband was the father of three nearly marriageable daughters, that is to say the oldest was some sixteen years old at the time.

Dr. Nelson.—This person I speak of has been married before. He had two children by his first wife, and he and his wife are both anxious to have a child. I told them that the probabilities were while the present state of things lasted they would not have a child.

Specific Odors.

Dr. Hardaway.—I might relate two cases that may be of some interest. One is a case of a patient who imagines that there is a very disagreeable odor coming from him. The man is perhaps a masturbator. He has all kinds of imaginable pains, and presents the features of a case of masturbation. He complains that there is an intolerable stench coming from his body at all times, and it is a mania almost. There is no odor that I can detect; nor are any of his friends capable of detecting it, but he insists that there is such an odor coming from him. Another case is one in which a specific odor emanates from the patient. Hammond has called attention to odors coming from the body. I have a case under observation where there is an odor of violets—a most delicate perfume coming from the body, not at all times—but intermittently. It is perfectly apparent to those standing around, and so strong that it can be detected on all sides.

Dr. Baumgarten.—I would like to ask if the odors have any connection with skin disease?

Dr. Hardaway.—I might say this: there is one disease in which from time immemorial there has been thought to be an odor arising from the body; that is small-pox. I have observed, I may safely say, more than two thousand cases of small-pox, and either my olfactories are not particularly acute, or from some other reason, I have never been able to detect any odor aside from the common odor of fever, which is so common and with which you are all familiar—a sort of sweetish odor. The odor

of fever is peculiar. But I have never noticed an odor arising from small-pox aside from this, although it has long been mentioned in the books, and they have attempted to describe it in a good many ways. I would like to ask the opinion of the gentlemen as to whether they have noticed any specific odor from small-pox patients.

Dr. Grindon.—I think I have noticed a peculiar odor from small-pox patients. There is a kind of sour element in it, like grease on the fire.

Dr. Hardaway.—Wouldn't the fever account for that; fever in connection with a pus formation?

Dr. Grindon.—There is something in the breath that resembles the smell of the skin. I don't remember ever having noticed this peculiar odor except in cases of small-pox.

Dr. Hardaway.—You know it is said in measles there is a kind of mouse odor which is peculiar to measles; have any of the gentlemen ever noticed that?

Dr. Baumgarten.—I think those odors affect different people's noses differently. That mouse odor has been especially spoken of by a Berlin physician about ten years ago, Dr. Heine, and others.

Dr. Carson.—I remember once on going to the ward of the hospital, I think Dr. Tupper was with me at the time, when there was a case of small-pox there. I entered the ward without knowing that there was such a case there, and as I entered I said to my assistant, there is a case of small-pox in this ward, the odor was so distinct, and there proved to be a case there, although it was not known at the time.

Dr. Baumgarten.—I don't think the odor, as such, can always be relied upon as an element in the diagnosis. I have no doubt that there are certain physicians who can detect the smell. I know a physician who vomited whenever he visited a small-pox patient. He said it was the odor which affected him so, and I advised him to use carbolic acid largely. He did so and was perfectly relieved. In my own case, the smell of syphilis is very distinct. I can detect it by the smell, not every case, but when I smell it I am sure that syphilis is present.

Dr. Hardaway.—I would like to ask Dr. Baumgarten if it is not possible that he smells the pustular eruption?

Dr. Baumgarten.—Perhaps so.

Dr. Hardaway.—Suppose the patient had no eruption; do you suppose you could detect the odor?

Dr. Baumgarten.—I don't know; I don't know what the smell is from, but it is very distinct. I can't describe it, however.

Dr. Nelson.—I think, perhaps, physicians neglect to cultivate the sense of smell as much as we might. I know some years ago there was a paper published in the *American Journal of the Medical Sciences* by a Cincinnati physician, in which he spoke of a peculiar smell which he himself had observed a number of times, and of which he speaks as the odor mortis. He said it was so characteristic—so pronounced in the hospital in which he was a patient (my recollection is that he studied medicine after he came out of the army), that it was a common saying among the attendants at the hospital when they smelled it, that some one had died. We often find people who say they can smell these peculiar odors, among the common people, not among medical men, and I think there is almost always some phase of truth in that kind of popular impression.

Dr. Shaw.—In regard to this odor in cases of small-pox, I am thoroughly convinced that to me there is a distinct, definite odor. Fifteen years ago I had small-pox; I was very ill with it, and I detected at the time of the eruption a very definite odor. In a number of instances I have noticed the same odor in other persons just at the time of the eruption, before there was any formation of pus, and to my sense of smell it is so characteristic that I insist upon quarantining a patient immediately when I detect that odor. I look upon it as being diagnostic of the disease. I remember an instance which occurred at an institution in this city last winter a year ago: a man was taken suddenly sick, and had a very high fever, and general erythematous eruption of the skin. It was at the time that there was so much small-pox in the city, and I didn't know exactly what to do in the case. It resembled scarlet fever a great deal; at any rate the man began passing blood by the bowels and nose, and he also vomited blood, and he was a very ill man indeed. When I first noticed the eruption I had the man put by himself. He was an attendant in the institution, and I remarked to another doctor at the time that although the case looked like one of scarlet fever, I didn't think it was scarlet fever; that there was an odor that made me think it

was small-pox. The man died, and his two brothers who waited on him died with small-pox within three weeks after at the small-pox hospital. They had been taken sick one after the other at the institution where their brother died, and were sent to the small-pox hospital, and died there.

Dr. Baumgarten.—I remember during the war, while I was treating some officers sent to the hospital, although each officer had a room by himself, there was one who was sent there simply to recuperate. He was good for nothing. He mingled with the other officers who were in about the same state of health, and many of them complained to me and asked me to quarantine the man, to keep him out of their company; that they couldn't stand his proximity on account of his very disagreeable odor—they called it the death odor.. This man suffered from chronic constipation, and the odor was perceptible to me.

Stated Meeting, May 29th—Dr. Gregory in the chair.

Dr. Tuholske read a paper on "The Use of Iodoform in Surgery." (vid. p. 97.)

Dr. G. A. Moses.—I think Dr. Tuholske has gone into the investigations and clinical observations with reference to the use of iodoform, far more thoroughly than any one that I have met with or that I have heard speak on the subject; and I am hopeful that his experience may be entirely confirmed; and that the utility of this agent may be extended. I have used the drug, but I have not found it to give such beneficial results as Dr. Tuholske claims for it. I recollect a case of a large cancerous tumor under the acetabulum, in which I made use of iodoform. It was intensely nauseating and disgusting in smell, and the application of the remedy for the relief of the symptoms was almost useless. It required very frequent application, and was extremely disgusting. It diminished the amount of discharge very much, but this was still very large, and the amount of iodoform used was considerable. I thought at one time that it had a depressing effect, however the patient was in such a condition that it was difficult to attribute it to the remedy. I attempted to get rid of this stench from the remedy, which was very unpleasant, and I found perfect protection by laying over

it a gauze saturated with Listerine. I remember some other cases in which I used it, particularly one of cancer of the cervix uteri. I have used it in more than one case, simply dusting it on the parts, and relieving the patient of the disagreeable effluvia in the same way, thus securing a perfectly antiseptic treatment, and certainly diminishing the discharge considerably. Another favorable effect of iodoform is its anesthetic effect; and what is perhaps even more important, is that it seems to have a very excellent influence in assisting the reabsorption of inflammatory exudations. I refer particularly to pelvic inflammations. I have found here suppositories of iodoform that the patient can introduce herself—say about ten grains, which may be combined with anything else—to be of great benefit.

Dr. Gregory.—I believe that nine-tenths of all wounds would heal without iodoform, under the circumstances described by Dr. Tuholske as conditions precedent to the successful use of iodoform. Certainly he gives the iodoform a first rate opportunity to be successful.

Dr. Tuholske.—I claim for it that it prevents decomposition. All the other indications it cannot meet, of course.

Dr. Gregory.—I have long been impressed that if the wounded surfaces are kept in close apposition, and the part injured perfectly immobilized—if it is possible, to place the injured parts in a position that favors the venous return, and at the same time, perhaps, in some measure increases the arterial circulation—if this can be done, I think that wounds will heal without any agency whatsoever except that which is furnished by nature. The difficulty in getting irregular wounds to heal is, first, the difficulty of precise apposition, which the doctor refers to. That is the great difficulty, because every irregular wound, which is closed in the ordinary way, is simply a wound covered with skin, beneath which all these little irregularities serve as recesses, as places of escape for the exudations from the divided vessels which must necessarily undergo decomposition, and must find an exit, and the wound must open to permit this exit. The wound would be infinitely better if it was not closed at all, but simply left open and placed in a position to favor the escape of these materials. If it were possible, however irregular the wound may be, to keep every part

in exact apposition, and to keep the parts so in apposition perfectly quiet, and the parts so injured so disposed as to favor the circulation, I think nine-tenths of the wounds would heal without any other agency whatsoever.

Dr. Dean.—My experience with iodoform has been very extensive, and my experience has corresponded in the main with that of Dr. Tuholske. We have for some time used iodoform almost exclusively in the venereal ward of the hospital. The great objection to it is, of course, its odor, the bad smell of the iodoform. Of late years I have hardly ever gone out without wondering if the people about me didn't notice the smell of iodoform. Before we began to use iodoform we used to use as much as a hundred pounds of carbolic acid per month; and while I wouldn't be willing to dispense with it, at the same time I depend more upon iodoform now than any other one disinfectant except carbolic acid, and there are some cases where I don't think any other can be as well used. I think that no disinfectant can be used so well in hospital practice, for instance, as iodoform. I tried the Lister method faithfully, and I think his plan was exactly followed, at least as far as it was possible. I don't think it is practicable in a hospital where cases are preserved for presentation to classes for the Listér method to be adopted with any satisfaction at all. We can come nearer to it with iodoform than with any other antiseptic that is now known, and purely because it can be used with such ease; just sprinkled on the part; dusted into the cavities and so on. I don't quite agree with the doctor with reference to the washing of the part with carbolic acid. I think I prefer to wash the part with a two and a half per cent. solution of carbolic acid, and I think that the tendency to secretion after it is very small. I have never seen so abundant a secretion follow as to wash away the iodoform where all the vessels that could be tied were ligated.

Dr. Gregory.—I am in the habit of using iodoform in wounds very frequently, by taking a probe and filling the wound, pressing in the iodoform, and I have never seen any bad effects from it—no poisonous effect. I had a patient some time ago with chancroids (the patient thought it was syphilis) in which I used iodoform very extensively for a number of weeks, and he finally killed himself. I suppose that might be accounted one of the

cases in which iodoform is accused of producing these nervous symptoms.

Dr. Hardaway.—Iodoform has a remarkable effect in relieving pain and causing the absorption and disappearance of buboes. Of course it is similar to the application of iodoform to chancroids. I don't know when I have used caustic in treating a soft sore. Dr. Tuholske refers to a case of lupus. I have not been so fortunate. Some years ago in treating lupus it was advocated in Vienna that the infiltrated patch be brushed with a fifty per cent. solution of potash putting iodoform freely over it and covering with cotton. I have tried this; but in my hands it didn't do much good. Possibly the disease was not in the right stage, but at any rate I got no success. I have found iodoform to be an excellent remedy in what we call sympathetic bubo. I don't know that it would have any effect in indurated, gangrenous bubo.

Dr. Gehrung.—If it is not out of order I would like to mention an objectionable feature of iodoform; it is not a very grave objection, nevertheless it is an objection. I have frequently tried to use the iodoform powder in intra-uterine disease, and it has caused very severe pains. What the cause of it is I can't distinctly state, but it has discouraged me in using it in that way. I should like to hear the experience of others in that regard.

Dr. Tuholske.—I should suppose it depended upon some individual peculiarity, as it has usually a very marked anodyne effect. I remember having used it in a number of cases of diphtheritic ulcerations. In one case I applied it in a case of diphtheria in a little fellow eight years old, and the little fellow did not make the least objection to its application. There is no doubt but what it has a very distinct anodyne effect. I blew it through the nose into the throat.

Dr. Gehrung.—I have found it to have an anodyne effect under other circumstances, but when I used it in the womb it acted differently; at least it does under certain circumstances. It is not easy for me to explain its action, but I thought it might be when the womb is under such conditions as to be a closed cavity, that the iodoform might be volatilized and cause distension almost as if air had been passed in.

Dr. Hypes.—A case which I have seen, it strikes me, argues

somewhat against the extensive use of the remedy. A man working in a brewery in some way fell into one of the vats, which contained hot water reaching about up to his waist, and received some very extensive burns. The integument was entirely destroyed in some parts. A splint was placed on the limbs, and a dressing, composed I suppose from the history of the case, principally of flour. This treatment was continued three weeks. After that the man suffered a great deal of pain and the dressing was removed and iodoform was sprinkled extensively over the bare raw surfaces. This was continued for three weeks. Six weeks after the accident I was called to see the patient in consultation with another physician. The patient had not been able to sleep for a week; he had not slept a single hour in that time. Occasionally he would take a short nap, but no regular sleep. He also had very severe spells of delirium, and would cry and scream, and raise the whole neighborhood. This began about a week before I saw him. I suggested to the physician that probably this was the result of the extensive iodoform dressing that he had been applying, and we changed this, leaving the wound open for the most part, but occasionally sprinkling it with powdered cinchona bark. In a few days this delirium disappeared, and also the nervous symptoms, and he began to eat and sleep. Now whether this was the result of the use of the iodoform or not, I cannot say, but it certainly was a fact that on the cessation of its use the symptoms disappeared. I would state that it had been applied very thickly over the whole surface—it was completely covered.'

Dr. Tuholske.—I think very likely that Dr. Hypes is correct. When granulations have once sprung up, the usefulness of iodoform is at an end. I have no doubt it acted as an irritant.

MICHIGAN STATE MEDICAL SOCIETY.

The eighteenth annual session of the Michigan State Medical Society convened in Kalamazoo, May 9th, 1883. The attendance was larger than at any previous session. The president, Dr. Geo. W. Topping, of Dewitt, called the meeting to order, and Rev. Geo. F. Hunting asked a divine blessing. Hon. E. W. De Yoe, president of the village, extended a cordial welcome to the

members of the society. He told of the good order and substantial comfort of their village, and of the elegance of their homes, and home life. He mentioned with pride their institutions of learning, and their public libraries, which aggregated 18,000 volumes, and the great charitable institution, which was located in their midst, for the care of those whose mental condition made their fate the saddest of any which can befall us. He again extended his welcome and hoped for a profitable session of the society.

The president, Dr. Topping, extended the thanks of the society for the cordial welcome.

Dr. Pratt, chairman of the executive committee, reported invitations to the society from Dr. Palmer, of the Michigan Insane Asylum, to visit that institution on Thursday, and an invitation by the village authorities to visit the municipal establishments of the village. Secretary Ramsey then read his report, giving an outline of the proceedings of the last meeting, of the routine work done and of the preparation for the present meeting. Dr. Smart presented his report, as Treasurer, showing an unexpended balance of $438.26.

Dr. Wm. Brodie, of Detroit, read a paper on "Aneurismal Tumors of the Scalp," describing a case occurring in his practice, of a woman aged 47 years, who fell upon the sidewalk, striking the back part of her head. In a few hours she felt a small lump on the left side of the occipital bone which gave her some uneasiness. This increased to the size of a goose egg and was painful. Other small tumors of the scalp appeared on the left side of the head, the larger being on the upper and posterior portion of the parietal bone. The largest tumor was explored with a trocar and found to contain blood. A distinct bruit could be heard, synchronous with the sounds of the heart, and the smaller tumors developed the same sounds. A bistoury was passed into the tumor when the blood poured out per saltum, as though an artery had been opened. This solved the diagnosis for this tumor as well as the rest. The wound was then closed. On the second day a violent attack of erysipelas took place. It was hoped that the inflammation and suppuration would exert a beneficial effect upon the tumor, but they did not. They discussed the propriety of ligating the occipital,

the temporal, or the external carotid artery, but ligation was deemed unadvisable. Pressure was considered, but was dismissed as impracticable in the case of the large tumor; and electricity was suggested, but the patient declined for the present any further treatment. No pulsation could be felt in any of the tumors. The pain felt in the large tumor has entirely left her, but otherwise there is no appreciable change. Her general health is now quite good. There was no pain in the smaller tumors at any time.

Secretary Ramsey announced the name of sixty-six new applicants for membership. President Topping referred the applications to the committee on admissions, and requested the applicants to appear personally before the committee.

AFTERNOON SESSION.

The society convened at 2 o'clock, P. M. The hour fixed upon for the president's address having arrived, Dr. S. S. French, of Battle Creek, one of the vice-presidents, was called to the chair. The president's address was a very able one and of especial interest to the physicians of Michigan. He presented for consideration the following:

1st. The best means of securing a higher standard of study and attainment in the profession generally.

2d. The possibility and desirableness of combined action between the Board of Regents and the State Medical Society in securing such legislation as is now generally needed to protect the people against the increasing number of irregular, irresponsible and unqualified medical practitioners.

3d. The manifest injustice of giving gratuitous treatment at the University hospital to patients able to pay for medical services, and for whom such treatment was not originally intended.

4th. The still greater injustice of treating at Ann Arbor resident patients by members of the Medical College faculty in term time, or during the session of the college, and receiving compensation therefor, unless the same be paid over into the University treasury.

5th. The extensive and unwarranted methods of advertising, which institute invidious comparisons between the professors and the profession at large, which is not only indulged

in bv the professors but by officers of the state to whom no such right is given.

6th. Whether the profession at large might not be consulted in the nomination of professors and without detriment to the faculty; and such other matters as may be deemed expedient to secure harmony of action between the members of the society and the medical department of the University. It is easy to be seen that a large share, to say the least, of the medical profession of the state has withdrawn their sympathy and confidence from the medical department of the University. Let these matters be fairly and fearlessly considered and if the evils complained of cannot be mitigated let the responsibility fall where it belongs. That there are evils existing in the medical department of the State University which need correction I believe to be evident to all fair minded, impartial men. To the end that something be done to correct these evils and to bring the medical school of the University into proper and profitable harmony with the medical profession I have ventured these suggestions for your consideration.

The address called out a warm discussion.

Dr. A. R. Smart, of Hudson, read a paper giving the history of a diseased ear, which had afflicted the patient for about thirty years. The patient suffered much pain and had almost constantly a discharge of pus from the ear. The doctor on examination with a probe thought he discovered necrosed bone. Grasping the substance with his forceps he withdrew what proved to be a glove button. This button had caused much suffering and nearly destroyed the ear, and the patient stated that the button had cost him a thousand dollars. The patient recovered rapidly after the cause of his trouble was removed.

Dr. H. O. Walker, of Detroit, presented a paper upon the use of "Plaster of Paris as a Surgical Dressing."

Dr. C. J. Lundy, of Detroit, read a paper upon "Errors of Refraction and their Relation to Constitutional Symptoms."

Dr. T. J. Reynolds, of Detroit, then read a paper on "Timely Catharsis."

Dr. H. J. Reynolds, of Orion, read a paper on the "Etiology of Urethral Inflammation." He thought that we should be very careful of our diagnosis of urethral troubles as they very often

involve the happiness and welfare of others beside the patient. He seemed to think that we resort too often to severe remedies, and that milder remedies with time and patience bring about better results in most cases.

Dr. Julius A. Post, of Lansing, presented an interesting paper entitled "Water and its Relation to Health and Disease." The paper was eminently a practical one and gave the minute details of most of the tests employed in water analysis and the deductions drawn from the presence of many impurities so often found in drinking water. Of chlorine, as shown by the amount of chloride of sodium or common salt, the doctor says: No single indication is of so great sanitary importance in judging of the purity or impurity and consequently of the safety or danger of using any water. Whenever the proportion of salt in well water rises above a very few grains per gallon, contamination by sewage or house drainage can be confidently asserted; and when salt is found to the extent of four or five grains per gallon, or upwards, the danger is imminent and it becomes the duty of the physician to prevent the further use of water from wells thus contaminated. The doctor also gave his experience with water having a fishy taste, which was owing to a peculiar fungus found quite commonly on fish which died during the epidemic and were found along the shore of the lake. He also related an interesting experience with water strongly tainted with the cucumber flavor, due to protoplasmic matter which was found to be intimately connected with a species of fresh water sponge. This matter would undergo decomposition and impregnate the water with its own peculiar flavor. The paper was largely drawn from the writer's own experience and bore evidence of hard work and observation upon the subject, which has extended over a term of years.

In the evening the citizens of Kalamazoo gave a reception and supper at the Burdick House, which was largely attended.

The committee rooms were filled with hard workers till late in the morning, and more and harder work was done than at any previous meeting. The large number of applicants for admission kept the committee on admissions at work nearly all night.

Thursday morning the report of the committee on applica

tions for membership was called for. Several applications were returned unapproved for lack of proper formality in the matter of endorsement by members of the society. With reference to one application, upon which the committee reported adversely, a long and heated discussion took place. It seemed to be the feeling of a good many that an effort was being made to bring into the state association, a personal quarrel between members of the association, to use the association for personal purposes, and to perpetuate a feud between members of the profession whose interests are identified with the State University and the profession outside of this.

Dr. Whelan, of Hillsdale, was the choice of the straight out Society men for president, and every effort was made by the University men to get him to withdraw.

The nominating committee reported the following nominations: Dr. H. Tupper, of Bay City, First Vice-President; Dr. I. S. Hamilton, of Tecumseh, Second Vice President; Dr. H. B. Barnes, of Ionia, Third Vice President; Dr. Augustus Keiser, of Detroit, Fourth Vice President. Drs. F. Pratt, of Kalamazoo, H. B. Shank, of Lansing, S. P. Duffield, of Dearbornville, Judicial Council. Delegates to the American Medical Association were also nominated by the committee. The Secretary holds over another year. Dr. Vaughn presented another set of names throughout to be substituted for those named by the nominating committee, but the nominations of the nominating committee were supported.

The hour for the election of president having arrived, Dr. A. F. Whelan was nominated by Dr. Smart and warmly supported by Dr. Hitchcock and Dr. French. Prof. McLean, whose own ticket had partially collapsed by the refusal of some of the most prominent names to accept the nomination, then arose and said that his friends had proposed to support him for president, but that he was young yet and could well afford to wait for those honors, and he moved that the secretary cast the ballot of the society for Dr. A. F. Whelan, of Hillsdale, for the next president. It was so ordered, and the secretary cast the ballot.

All business having been finished, Dr. Baker, of Lansing, read an interesting paper on "Sanitary Matters," which was well received.

Dr. Eugene Smith, of Detroit, read a paper of great and practical interest, entitled "Ulcers of the Cornea," which was discussed by Dr. Connor and Dr. Smart.

Dr. Tupper of Bay City, presented a paper entitled "Gulf Weed in the Treatment of Polysarcia Adiposa."

An invitation was given to hold the next annual meeting at Grand Rapids, and on motion the invitation was accepted.

The society then adjourned.

Midzu Ami.—This is an extract of rice which is used in Japan quite extensively as an article of diet instead of syrup or honey. It is being used now by foreign physicians, and the younger Japanese physicians, who have been educated by foreigners, instead of malt-extracts or maltine, and is considered to be more easily digestible than those preparations. The method of preparation is thus described by Dr. J. C. Berry, of Okayama, Japan, in a letter to Dr. S. Weir Mitchell:

"1st Malt (moyashi). This is made by putting barley into a pail with a perforated bottom, and moistening with water for two weeks, by which time (varying with the weather) the barley germinates. Then spread and dry. After which rub off the sprouts, winnow and grind, when it is ready for use.

"2nd. Take of *mochi gome* (a very glutinous rice, from which *mochi*, a kind of bread, is made by simply cooking the rice and then pounding in a mortar) one *to* [a *to* is one quart, one pint and a half a gill, imperial measure]. Cook the rice by steaming in a wooden box until moderately soft. Remove to a pail and add malt 450 *momrue* [100 *momrue* = 1 lb. Troy] and five *sho* [= ½ *to*] of water. Then with the hands thoroughly mix the whole, squeezing and crushing the rice until it assumes a hard, jelly-like consistence. Then allow to remain for twelve hours, during which time stir three times. (If the weather is very cold, cover with straw mats; if too warm, keep in a very cool place). Remove and place in hempen bags, put in a strong box and press out the liquid with firm pressure. Then put into a pot and evaporate to a proper consistence over a slow fire."

The *mochi gome* is much richer in gluten than the rice commonly used by the people, while that too is richer in gluten than the Chinese rice.—*Phil. Med. Times, June 16, '83.*

FOREIGN CORRESPONDENCE.

LONDON LETTER.

DEATH OF MR. SPOTTISWOODE.—MEDICAL FACULTY OF CAMBRIDGE UNIVERSITY.—MEDICAL GRADUATES' CLUB.—BRITISH MEDICAL ASSOCIATION.—CHILDREN'S HOSPITALS.—CHOREA.—PRINCE OF WALES.—MEDICAL SOCIETY OF LONDON.—ELECTRICITY IN MEDICINE.—MEDICAL STUDENTS' RECREATION.

LONDON, July, 1883.

Science in England, and I might say the whole scientific world, has experienced a great loss in the recent death of Mr. Spottiswoode, the President of the Royal Society. He was the head of an eminent printing firm in the City of London, and among other offices held the post of what is called "the Queen's Printer." All government documents and parliamentary papers were printed at his works. Besides this extensive business, which he never neglected, he devoted much time to scientific pursuits and investigations, and perhaps was one of the most learned men of his time. He contracted typhoid fever in a recent visit to Rome, and not being of a very robust constitution he sank under the disease about the end of the third week. The frequency with which typhoid fever is contracted in Rome should act as a warning to all those contemplating a visit to that famous city.

Several changes have lately taken place in the Medical Faculty of the University of Cambridge. It appears that the University intends having a complete medical school. Prof. Humphrey has resigned the chair of Anatomy and has been appointed to a recently formed Professorship of Surgery. Michael Foster has been made Professor of Physiology; and the vacant chair of Anatomy has been filled by Prof. A. Macalister, late Professor of Comparative Anatomy in the University of Dublin. The

Medical School at Cambridge now numbers 200 students. The medical graduates of the University have recently formed themselves into a club under the presidency of Sir Geo. Burrows, Bart., M. D., for the purpose of forwarding the interests of the Medical and Natural Science Schools of the University and promoting good fellowship among its graduates. The inaugural dinner of the club was held on the 27th of last month at the Marlborough rooms, Regent street, London, the chair being taken by Dr. Paget, the Regius Professor of Physic at Cambridge. The Vice-Chancellor of the University was also present and about sixty of the chief physicians in England. The medical graduates of Oxford and Cambridge take the highest position in the profession and have at the old Universities associated and made friendships with the leading men of the country and of the other professions, especially those of the church and bar.

The British Medical Association is about to hold its fifty-first annual meeting at Liverpool. It promises to be a most successful gathering, and judging from the importance and interest of the chief subject to be discussed, much useful information may be the result. The business of the association is to be divided into ten sections, viz: Medicine, Surgery, Obstetric Medicine, Public Medicine, Anatomy and Physiology, Pathology, Psychology, Ophthalmology, Diseases of Children, and Otology. Each section has a president, two vice-presidents, and two secretaries, and will meet in different buildings or large halls in the same building; the business of each section being left entirely separate. The section for medicine will have a considerable portion of its time absorbed by consideration, from various points of view, of the large question opened up by the discovery of Koch's bacilli in the sputum of phthisical patients; and the treatment of the disease by antiseptic inhalations. In the public health section there will be a discussion on the etiology of diphtheria, which promises to be of great interest, considering the attention which has been called to the subject by its investigation by the Collective Investigation Committee of the Association. In the section on children's diseases a most important paper is promised by Dr. Thomas Barlow, of the Hospital for sick children, in Great Ormond street, "On Rheumatism and its Allies in Children." If we are ever to differenti-

ate the numerous diseases now all classed under the common name of rheumatism, the disease, as it affects children, promises the best field for success. The rheumatic erythema, the rheumatic purpura, the rheumatic chorea, the rheumatic nodules, the rheumatic heart affections without joint implication, so noticeable and distinct in children, seem merged and more complicated in the adult. I am afraid that very few of our American cousins visited during the late International Medical Congress what I may call the model hospital in Great Ormond street. The Children's Hospital, at Pendlebury, near Manchester, has lately issued a most interesting volume, being an abstract of some of the medical and surgical cases treated at the hospital during the year 1882. It will prove to be a most useful book of reference on children's diseases. The example should be followed by other similar institutions. There is one very interesting statistical table on chorea, in which, among other things, is tabulated the probable causes of the disease. All the recognized causes seem to have been inquired for except one which we have in London found to be a very powerful exciting cause, that is, the excessive brain work imposed upon young children in the present day. Several cases I have seen in which young children developed chorea while preparing for examination. It was estimated a short time ago that the school board was responsible for about seven per cent. of the cases of chorea. The school board in England is an institution by which the provident part of the community pay for the education of the children of the improvident. Many a young medical man who is struggling in single blessedness to obtain enough money to support a wife and family, is paying in taxes for the education of the children of those who are taught to feel no such obligation; and the children of the latter are in the future to compete with and perhaps obtain appointments in preference to his own.

The Prince of Wales has shown on several occasions a most favorable inclination towards the medical profession. He seems rather to take pleasure in the society and conversation of doctors. The most recent way in which he has shown this predilection is his presence this month at the *conversazione* given at the opening of the new rooms of the Medical Society of London. The Medical Society is one of the oldest of the

now numerous medical societies in this country, at the meetings of which papers on professional subjects are read and discussed. Some of these societies in addition have libraries of more or less value, from which members can obtain the loan of books. The Medical Society was founded in 1773. The Clinical Society has lately appointed a committee of its members to inquire into and collect information on the subject of the treatment of spina bifida by injections. By some authorities it is considered a very dangerous procedure, when again by others cases so treated have done exceedingly well. The elucidation of such vexed points is a very worthy object to be sought for in this way by the medical societies. The committee appointed in 1876 by the Royal Medical and Chirurgical Society, to inquire into the difference or not between diphtheria and croup, did not settle the vexed question, but succeeded in showing how extremely ignorant we all are of the etiology of diphtheria.

The use of electricity in the treatment of disease is becoming much more frequent in England now than was the case a few years back. Several of the London hospitals are having electrical departments added to the numerous other special departments which already exist. In America the subject appears to have been studied scientifically by medical men for some long time past, and great advances made in its application to medicine, but in England the use of electricity has been very much left in the hands of quacks, and its utility ignored as a means of treatment by most qualified men. It has been used as an aid to diagnosis in many nervous diseases, and in some it no doubt is of great assistance, but the majority of nervous cases can be diagnosed without its use, and in these it only serves as an additional means of confirming an opinion already formed; in the treatment of these cases, either from want of perseverance or imperfect knowledge of the mode of application, the results already attained have not been very encouraging; but in neuralgias, and what are generally called functional disorders, the benefits derived from this agent are attracting much attention. In sciatica, a disease usually most obstinate in yielding to treatment, galvanism has been found more useful than any other remedy, and is quite superceding stretching the sciatic nerve, which promised some time ago to become the fashionable mode of treatment.

At the end of June a grand concert was given by the students and resident medical officers of St. Bartholomew's Hospital in the great hall, to which I was invited. The programme was gone through in a way most creditable to the training and talents of the students. The students of the London hospitals have also recently held a meeting for engaging in athletic sports; the champion hospital being the one that wins the greatest number of events, and becomes the holder for the next year of a very beautiful silver challenge shield. The shield this year was won by St. Thomas' hospital.

E. V. A.

CONTINENTAL LETTER.

PROFESSOR BILLROTH AND HIS OPERATIONS—THE VIENNA GENERAL HOSPITAL—ORTHOPEDICS—MATTERS IN MUNICH.

Professor Billroth is a master in surgery. For the performance of bold and major operations he has no superior. He is in the heyday of life, apparently fifty-six. Though somewhat given to Germanic obesity, yet he bids fair for some years to come to remain at the head of the surgical world. Though all his family, that is to say his parents and brothers and sisters, have died of consumption, it is to be hoped he will be the exception, and appearances indicate that he may. As a teacher of surgery for the under-graduate he is not as well adapted as others, for example Professor Albert, who draws larger classes in point of numbers. But for the more advanced student, and the doctor, Billroth gives operations (and explains them too) which for boldness, variety and originality cannot elsewhere be had.

He practices antisepsis, having the spray, instruments, hands, sponges, ligatures, dressings all well carbolized. A douche of carbolized water, 2.5 per cent., is constantly employed to wash off the parts and cleanse out the wound. The solution is contained in a brass vessel conveniently suspended at a proper height on the wall, and connected by rubber tubing to the nozzle. Iodoform is frequently employed—for example, the dressing to an absorbent surface would be lint

sprinkled with iodoform. The surface of the part to be operated on is always washed with soop-suds. Professor Lister, however, employs only the carbolic acid solution, as he says it attacks the fatty matter of the part and acts as a detergent.

To show the extreme care to which Professor Billroth carries his fear of germs, his assistants, six or eight in number, must on each occasion wear freshly laundried linen coats, having been rinsed out from a carbolized solution. A spectator, sometimes invited to witness private and particular operations, for example abdominal, is requested to put on fresh linen and to wear his dress suit.

One is struck with the thought that if there is nothing especially preventive in the carbolic acid, yet certainly Listerism has taught cleanliness and care. Fighting imaginary germs gives a practicality to the methods of procedure that otherwise would not be secured. The theory gives a directness to the means employed.

The anesthetic used is a mixture of chloroform (10–16ths), ether (3–16ths) and alcohol (3–16ths), administered on a shallow cup-shaped wire frame covered with flannel. Though rather tedious in inducing the anesthetic state, yet the mixture seems quite safe.

I may briefly refer to a few of the operations I witnessed at Professor Billroth's clinic:

A goitre, size of an orange, situated rather in front, was removed with the scalpel. An incision in the median line exposed the sac, which was readily separated from the adjacent tissues; getting down to its base there was considerable hemorrhage, which however adroitly applied ligatures soon controlled. In another case, in which the tumor was large and more unilateral, the primary incision was made obliquely, from above downwards, over its most prominent part; again was the bleeding quickly arrested, and the tumor turned out, drainage tube introduced, and antiseptic dressing applied.

Two other cases in which I saw the first dressing removed were doing remarkably well—all females. On an average four cases are removed weekly, all with the knife. One death only is recorded, occurring on the day following the operation; doubtless air had entered one of the veins—an accident to be feared, and that cannot well be prevented.

In a case of chronic bone disease three or more inches of each of four adjacent ribs, at lower and inferior part of chest, were removed. The periosteum was well separated and saved, and the ribs divided with the bone forcèps. The pleura pulmonalis was exposed, and a formidable looking wound resulted. But it was well douched with the carbolized solution and stuffed with iodoformized gauze, the edges stitched and the external dressing as usual.

In the application of the antiseptic after-dressing it is very frequently necessary to carry the bandages around the body. The patient, still under the influence of the anesthetic, can not assist, and is a dead weight difficult to handle. I have frequently observed assistants to have much trouble in this particular. At Prof. Billroth's clinic the matter is adroitly managed by having small padded stools to slip under the patient's hips and shoulders respectively.

In the case of an artificial anus resulting from an old strangulated hernia, Professor Billroth removed three or four inches of the adjacent intestine, stitched the divided ends together and closed up the opening in the abdominal wall.

A case of a foreign body in the male bladder, just what he knew not; he succeeded on the second attempt, having thrown fluid in the viscus, in perfectly grasping the body, the blades of the instrument opening antero-posteriorly, and by care withdrawing it through the urethra. It was apparently a piece of hard sealing-wax, two inches long by three-eighths of an inch thick at its widest part. In a case of chronic disease of the tarsus he removed freely and largely the affected bone. Case of neuralgia of the inferior dental nerve he scraped the bone and removed one-half inch of the nerve.

During my stay in Vienna, Prof. B. removed a cancer of the stomach in which there existed stenosis of the pylorus. To make the operation complete, removal of the lower end of the stomach and the adjacent duodenum was necessary. The opening in the stomach was stitched up until it was the same size, i. e. as small, as the divided duodenum. The two, the viscus and tube, were then sewed together. In stitching the parts the serous surfaces were approximated, carbolized catgut used. At the time I left, six days following the operation, the patient,

female, was doing well. She had taken milk nourishment from the first.

Evidently Prof. B. selects for operation the most formidable cases, and so he should, as he is both adroit and successful—is *facile princeps.*

In addition to surgery the advantages for professional study are very excellent at Vienna. The general hospital, the largest in Europe, capable of accommodating 3,000 patients, founded just one hundred years ago, is an irregular, two to two and a half story building, taking the form rather of a square. It covers considerable ground, and incloses courts that are tastefully laid out in graveled walks, grass plats, shrubbery, trees, etc. Seats are freely distributed, whereby patients are enabled to enjoy the out-door air and sunlight, many being carried out, and to their great profit. This is a feature that other hospitals might advantageously imitate. Much care seemed to be given to cleanliness, ventilation and other sanitary precautions. Besides the general hospital, there is a very extensive polyclinic, where thousands of out-door cases are examined and prescribed for annually. The material of both these institutions is available for medical study. Being so extensive and so compact affords unsurpassed opportunities for investigation in special lines. It is all utilized, and there are most able professors in all the departments. But a commendable and most advantageous feature is the private courses given by some of the younger men, usually "assistants," who have the time and will take the pains to drill the students. The earnest working pupil will get on almost anywhere, but even he, and certainly the majority, do best by being personally instructed and examined. The advantages for studying pathological anatomy and histology are excellent. Proficiency in physical exploration and in the signs of disease can readily be acquired, though the expenditure of some money is necessary, if one would avail himself of those advantages. And thus students are drawn from all parts of the world. From America alone, last winter, there were at one time over one hundred in attendance. St Louis was represented, and still is, by two young physicians, doing good work.

In the way of orthopedics I saw but little that was new. At the general hospital clubfoot is treated by tenotomy and the

following plaster of Paris dressing or other appliance. Hip-joint disease is treated by extension—weight and pully—in recumbency, the pelvis resting upon and being attached to a padded block strapped to the bed frame. A perineal vertical rod arising from the block serves for counter-extension. The limb is usually swung clear of the bed. If the patients suffer from the confinement, they are gotten up and allowed to be about on Taylor's splints. Excision of the hip-joint is occasionally though rarely performed, the past experience of the hospital rather deciding against it.

Little patients with Pott's disease are confined to their beds, almost immobilized, the back resting on a shell or pad. Later on, if they must be up, the plaster of Paris jacket is applied, and cases requiring it the over-arching head-rest is attached. At the polyclinic the portable plaster jacket is used. For knock-knee dependence is mostly placed upon apparatus. In severe advanced cases the bone—lower end of femur—is sawn through, the limb straightened, and dressed in plaster of Paris. I saw acute knee-joint cases that had been tapped and dressed with gypsum doing well.

Rotary lateral curvature of the spine I saw mostly at a private orthopedic institution established some twenty years since. At present under the dictatorship of Dr. Heinrich von Weil, pleasantly located on high ground, within a large yard containing shade trees, lawns, flower-beds and walks. The spinal cases, all girls or young women, were lying supine on mechanical couches. Movable wooden pads, attached to a frame, were made to press upon the convexitus of the thorax and upon the prominent hip. The pressure could be exerted antero-posterior as well as laterally. No effort was made at extension. The cots were arranged side by side under a shed open in front, thus giving light and air. A healthful summer arrangement. The supine position was thus retained sixteen or more hours daily. Quite at hand was the gymnasium or exercising room, where on vertical ladders, trapezes, hanging rings, parallel bars, car or truck, on whichpatient lay prone and drew herself up on an incline track, and other mechanical apparatus, the patients exercise systematically several times daily. In all the exercises in which suspension by the hands occurs, the hand corresponding to the lateral concavity of the chest (usually the left) was

the highest. The patients, putting aside their long skirts, wear a convenient habit, flowing trousers, tight or gathered below the knee, and a short sac. I was shown a corset brace, designed to make pressure on the prominent parts. I suspect but little reliance is placed upon its use, possibly employed when patients are discharged, as a slight support. The institution is designed and conducted for the treatment of deformities from whatever cause, mechanical appliances, electricity, massage, etc., being employed as occasion requires. In hip-joint disease Taylor's splint is used.

The method invoked at this institution of dealing with orthopedic cases is the correct one, in so far as having the patient under the constant supervision of the medical attendant in a hospital, with all the requisite appliances and trained assistants, and, more than all, removed from outside suggestions or interference of parents or friends—often well intended, but destructive to successful treatment.

I do not find in London, or here on the continent, that antipathy existing against sanitary institutions or hospitals that prevails with us in the States. Thus people readily consent themselves, or allow members of their families, to remain in and be treated at such places. Better results are thereby secured, for the best work can be done at the thoroughly equipped institution. Prof. Billroth rarely or never operates at the patient's private house.

At Munich I was unfortunate in not meeting Prof. Nussbaum. A fortnight previous to my arrival he had met with a fall at his own home and fractured his thigh. He was however doing as well as the circumstances allowed.

In the same city I was interested in the chemical laboratory of the justly celebrated Liebig—a grand building, with abundance of rooms, apparatus, collections, etc., now under the direction of Professor v. Baeyer. A very fitting memorial rises over Liebig's tomb. On a properly elevated and substantial base is a fine bust in the purest of white marble, a speaking countenance and a most excellent piece of work, and very wisely protected from the weather by a glass shade or frame, thus secured from becoming smutty and streaked. Exposure would soon mar its beauty.

How the exposed work of master sculptors in marble and

stone, whether as isolated statues or on public buildings in connection with architecture, is greatly ruined by the discoloration induced by the smoke and dust contained in the air, and streaked on by the rain. Sadly so—commencing with old St. Paul's of London, down through all the continental cities I have visited. In the case of some beautiful marble statues, I did wonder why soap and water, or other detergent, was not applied. Perhaps this matter of discoloration is not so observable in Munich as in other cities, because there are so many—possibly the majority—statues and monuments in bronze. Certainly no city of its size has an equal number. They adorn the public places and parks in profusion. This is the less to be wondered at when we realize that Munich is and has been for years a great art center; and, second, that the most noted bronze foundry of the world was located here. Its work is to be found in all civilized countries. The equestrian statue of Washington, 24 ft. high, statues of Patrick Henry, Marshall, Lewis, Jefferson, Nelson, Mason and others for our country were cast here. Whether or not Munich possesses the largest statue, in size, I cannot say, but she has an Amazon in the shape of one called Bavaria—a colossal female figure 54 ft. high, in bronze. To climb up into its head on stairs within was a task.

At the same cemetery (Gottesacker, God's Acre) containing Liebig's monument there were in the chapel, or receiving room, several bodies lying awaiting burial. The faces were exposed, and they were dressed with flowers in profusion. Friends were not admitted, but through the glass partition the remains could be viewed. There was the octogenarian grandmother, wasted, and the plump little babe of eighty days — the stalwart man stricken down in his prime, and the youth of thirteen, the not fully opened bud blasted—all side by side, presenting a strange contrast. It were doubtless an excellent sanitary measure to at once after death remove the corpse from the house to a properly prepared receptacle like this.

Speaking of monumental tributes, I quite accidentally, in the beautiful Protestant cemetery at Naples, came upon an appropriately designed and elegant marble monument over the grave of "Mary Somerville, 1872."

A. J. Steele.

COMMUNICATIONS.

We have been requested to insert the following:

HALL OF THE ST. LOUIS MEDICAL SOCIETY, POLYTECHNIC BUILDING, COR. 7TH AND CHESTNUT STS.
June 23, 1883.

On June 23d, 1883, Dr. Atwood introduced the following, which was adopted by the St. Louis Medical Society, after some considerable discussion:

WHEREAS, At the recent session of the American Medical Association, a preamble and resolution were offered for the consideration of said Association, purporting to represent the sense of the St. Louis Medical Society upon the propriety of preparing a new code of ethics, or altering and changing the existing code in accordance with the present relations of the profession; and

WHEREAS, In said preamble the assertion is made that "the code has accomplished all that it was designed it should, but at present many of its features are obsolete and not adapted to our wants. The necessity of an early revision is very apparent, is loudly called for in all parts of our land, and cannot be repressed much longer. * * * The time has come when the loud and very soon universal call will have to be heeded;" and

WHEREAS, The St. Louis Medical Society did not instruct, "That the Committee be authorized to prepare a code of ethics which in their view will meet the wishes of the profession, and submit the same to the meeting of 1874;" therefore,

Resolved, That the St. Louis Medical Society distinctly repudiates the statements contained in said preamble, and again expresses its fealty to the existing code of ethics as a time honored and most suitable fundamental law of the profession, and specially deprecates any action calculated to reflect upon its loyalty to those principles which have heretofore secured immunity from the machinations of schismatics within or enemies without.

A. H. OHMANN-DUMESNIL, M. D.,
Recording Secretary.

NOTES AND ITEMS.

CHARLES W. CALHOUN, M. D., died on Saturday of fever, at his mother's home in Shweifat, Mount Lebanon.

Dr. Calhoun was the only son of the late venerable Dr. S. H. Calhoun, of Abeih, Mount Lebanon, and was educated at Williams College, Union Theological Seminary, and Bellevue Medical College, New York. A native of Syria, his knowledge of the Arabic and of the Syrian people gave him access to their hearts and homes.

He was beloved by his associates, and was ardently devoted to the missionary work. At one time he was offered a position in the Beirut College, but declined, preferring the work of an itinerant medical missionary.

About a year since he was subjected to a vexatious series of persecutions from the Turkish authorities in Tripoli, Syria, and has spent the most of his time during this period in traveling among the villages to the great comfort of the people. The American Minister in Constantinople was requested to act promptly in demanding redress from the Turkish authorities for their insulting conduct in pulling down the sign on Dr. Calhoun's office. Gen Wallace demanded an apology from the Turks for the injury done Dr. Calhoun, but just at that time he was summoned to that home where "the wicked cease from troubling, and the weary are at rest."

His death is a serious loss to the mission in Syria. He had just returned from a protracted missionary tour with Rev. Mr. Dale to Baalbek, Hums and Hamath, and the last letters from Syria, of May 20th, reported his arrival in Tripoli, suffering from an attack of fever. He must have afterwards returned to Beirut, as he died at his mother's home in Shweifat, only six miles from Beirut. What young man will volunteer to take his place.—*Rev. H. H. Jessup, in N. Y. Evangelist.*

THE PICRIC ACID TEST FOR ALBUMEN.—DR. GEORGE JOHNSON writes:

It should always be borne in mind that, in testing for albumen, the *picric acid must be in excess.* A few drops of a saturated solution of picric acid in a highly albuminous specimen will form a coagulum, which is quickly redissolved. When urine contains much albumen, it should be mixed with its own volume of the picric acid solution; and in testing a fresh specimen, it is better to begin by adding an equal volume of the test liquid.

One difference between picric acid and nitric acid as tests for albumen is, that whereas an excess of nitric acid, especially when the urine is heated, will entirely redissolve the previously precipitated albumen, no excess of picric acid will redissolve the precipitate which it has once formed in an albuminous solution. Picric acid solution on the surface of the urine is applicable only for the detection of a minute trace of albumen. For this purpose, in my paper read at the Clinical Society, I advised that a column of urine four inches in height should be poured into a six-inch test tube, and upon this one inch of the picric acid solution. The result is that the upper layer of the urine is mixed with about its own volume of the test liquid; and if albumen is present, the stained portion of the urine is instantly rendered more or less opalescent, and thus contrasts with the unstained and transparent urine below. If the picric acid solution were allowed to flow so gently on to the surface of the urine as merely to come in contact and not to become mixed with its upper portion, the albumen, if present, would not be detected, or it would be indicated only after an interval of some minutes, when the two liquids had become mixed by slow diffusion. There must be an actual mixture in about equal proportions, and not merely contact of the two liquids, to ensure the action of the test.

The slight opalescence caused by the picric acid solution in a sample of urine which contains a mere trace of albumen is always increased by the application of heat. So that, if the flame of a spirit-lamp be applied to the upper part of the opalescent column, this will become more opaque than the lower part, which had not been exposed to the heat. I now invaria-

bly apply heat to a specimen of urine which has been rendered opaque, or more or less coagulated, by picric acid; my chief reason for this practice is to ascertain if peptones ever appear in the urine. I have shown that, whereas the albuminous precipitate with picric acid is rendered more opaque and coherent by heat, the precipitate which picric acid gives with peptones is entirely redissolved by heat, considerably below the boiling point.

The microscope alone would serve to distinguish the precipitate caused by picric acid with peptones, with urates, and with albumen respectively.

The precipitate recently thrown down with artificially prepared peptone appears under the microscope quite homogeneous, and free from solid particles; but when the precipitate, having been dissolved by heat, reforms on cooling, it seems to consist of numerous very minute, apparently globular particles, in which the so-called "Brunonian movement" is very active. The microscopic appearances of uric acid and urates are so well known as to need no description.

The precipitate produced by picric acid with albumen presents irregular clusters of granular material, which appear much larger and more opaque after the application of heat. According to my experience, a deposit of uric acid and urates is about as rare a result of adding picric acid to urine as a similar deposit caused by nitric acid; and hitherto I have met with no specimen of urine in which the presence of peptones has been indicated. A deposit thrown down by picric acid and redissolved by heat, may pretty safely be assumed to consist of urates, but in any case of doubt, the addition of Fehling's solution and the microscopic appearances will at once serve to distinguish between precipitated peptones and urates.—*Brit. Med. Jour.*

Green Herbs in Winter.—Dr. F. J. B. Quinlan suggests that it may be possible to utilize, in the preservation of green herbs for medicinal purposes, the process which has been advocated so strongly of late in preserving fresh, green food for cattle, the method known as ensilage. The process, as modified for medicinal herbs, would consist in cutting the herb very fine and packing it by screw pressure into a glazed earthen-

ware jar, with an air-tight cover, and burying it in the ground, or depositing it in some place where it would not be subjected to any great variations of temperature. If the experiments now in progress prove successful, it may be possible to improve greatly some of the tinctures and fluid extracts which now are found to be very variable in therapeutic results.—*Brit. Med. Jour.*

Man as a Machine.—The apparatus is a living machine, governed by an immortal soul, working for itself and for others. The machine finally wears out, leaving about seven pounds of lime salts to the hundred, and a memory—deathless for a chosen few; weak and fugitive for the great majority. Nevertheless, life is worth living if we have the approval of a good conscience.—*Note by Prof. Sidney A. Norton, Ohio St. Univ.*

Dr. Theophilus Parvin, of Indianapolis, has been elected to the professorship of obstetrics and diseases of women and children in the Jefferson Medical College, which Prof. Ellerslee Wallace has resigned on account of ill health. Dr. Parvin is 54 years of age, and has been engaged in the practice of medicine for 31 years. He has held professorships in the Medical College of Ohio, in the College of Physicians and Surgeons of Indiana, and in the University of Louisville, having filled the chair of obstetrics and medical and surgical diseases of women in the latter institution for several years until the time of his election to Jefferson Medical College.

Caution.—Drs. Geiger and Hoyt, of the *St. Joseph Medical Herald*, report to us that a deaf mute, by the name of R. L. Douglas, is traveling through the country without authority receiving subscriptions for various medical journals, and giving receipts for them in their name. Look out for him.

Married: Nelson—Nelson.—On the evening of Wednesday, July 25th, at Elmira, N. Y., by the Rev. Henry A. Nelson, D. D., of Geneva, N. Y., assisted by Rev. Stanley D. Jewell, of Big Flats, Dr. Edwin M. Nelson, of St. Louis, and Emily A. Nelson, only daughter of D. B. Nelson, of Elmira.

ST. LOUIS
COURIER OF MEDICINE.

VOL. X. SEPTEMBER, 1883. NO. 3.

ORIGINAL ARTICLES.

DO MATERNAL IMPRESSIONS INFLUENCE THE GROWTH OF THE EMBRYO?

BY N. M. BASKETT, M. D., MOBERLY, MO.

[*Read before the Moberly District Medical Society, Feb. 6, 1883.*]

WE desire to present some facts which, when properly considered, may serve to throw some light upon this mooted question. The wide-spread, the almost universal belief in the influence of maternal sensations upon the growth of the fetus demands from the medical profession some consideration. If we can blaze out a path through a wilderness, and establish a plain highway for future travelers, it is our duty to do it.

And to do this, it seems our best plan would be to consider, first, the relation existing in a physical point of view between the mother and the ovule, at the time that Nature in her mysterious workshop begins the process for the evolution of a new being. It is almost unnecessary for me to refer to the menstrual molimen, the escape of the ovum, its descent along the Fallopian tube, its contact

with the fecundating fluid of the male. Farther on I may attempt to show that even in the primary act of fecundation mental processes are at work, but, for the present, I shall content myself with the relation existing between the mother and child at the time of the formation of the decidua, and the envelopment of the ovum by that membrane.

During its passage along the Fallopian tube the ovum has developed what is known as the shaggy chorion. Its first change consists in its extension into a number of minute prolongations called villi, through which are absorbed the fluids (from the parent) necessary for its growth. When it reaches the womb, that peculiar membrane known as the decidua, and which is cast out monthly unless impregnation occurs, receives it. Impregnation occurring, the decidua by reflection envelops the ovule, and an intimate connection is established by the villi between the chorion and the decidua, the villi dipping into the open mouths of tubules which are found in the decidua. An important secretion is poured forth by the uterus from these follicles, from which the villi of the chorion derive sustenance for the ovum. As yet no blood vessels exist in either chorion or decidua.

With the continuation of the vital processes the fetal blood vessels ramify through the villi of the chorion, which in some of the mammalia entirely surrounds the ovum, and in which it lies imbedded like the nucleus of a cell. But in man, with the appearance of vascularity a portion of the chorion withers away, and there is an agglomeration of the nutritive vessels at some one part of the fetal ellipse. At the same time that the fetal circulation is being established, the maternal vessels ramifying around the tubules of the decidua become enlarged and surround the fetal vessels, which we have shown develop in the permanent portion of the chorion. In this way is formed the placenta, through which the embryo is nourished after the second month.

This nourishment is a process of osmosis, the placenta being both a secreting and excreting membrane. On one hand it receives from the parental blood those elements which are to build up the future being; on the other, it parts with those excrementitious and gaseous elements which are incompatible with its nourishment and existence.

It will be seen that at no time is there any direct vascular connection between mother and child. The systems are distinct. The vessels of each meet and touch, and perform their functions, and separate. What is true of the blood vessels is equally true of the nervous system, for as yet nerves have not been shown to exist in the placenta, although from analogy we believe they will yet be discovered. But the sympathetic system becomes wonderfully developed in the uterus during pregnancy, and the influence which it is capable of exerting upon the uterine growth, so long as no nerve connection is shown, must be conceived to exist separate and apart from any direct connection between the mother and the embryo.

But if no direct vascular or nervous connection can be shown to exist between mother and child, are we therefore to conclude that maternal impressions, or states of mind, are inadequate to exert any influence upon the growth and development of offspring? Let us see.

At the time the ovum detaches itself from the Graafian follicle, and begins its course along the Fallopian tube to the uterus, it is as much a separate and distinct existence as when it is fecundated by the male and acquires a capacity for development. Nay, more. We know that the ovum has lain in the ovary for many months with a capacity for development if in contact with seminal fluid. It awaited only a release from the prison house of nature and the contact of the male. And what is true of the ovum is true of the spermatozoa. They are secreted by the testicles, and lie in the male seminal ducts until the favorable moment for the germination of the female ovum arrives. And yet no one is ready to deny the fact that

mental traits are transmitted from parents to child. No one exists but what is possessed of some peculiarity, or habit of body, which has descended to him from his ancestors. Yet at the time of coition the semen of the male and the ovule of the female are in no closer relation to either parent, than is the embryo to the mother, during the long period of pregnancy.

That the belief in the influence of maternal impressions upon the undeveloped fetus is almost coincident with the history of humanity is evidenced by the scriptural story of Jacob and Laban, and the contract concerning the breeding of kine. It is unnecessary for me to recite this history, for medical men are noted for their acquaintance with biblical lore and the precepts therein inculcated. Stockmen of the present day also believe the doctrine, and it is no rare thing to see a mare of bad color confronted while being bred with a horse of good color, for the purpose of influencing the color of the foal and making it marketable. Carpenter, in his elegant Encyclopedia on Human Physiology, also refers to this fact in connection with maternal influences.

The influence of heredity is marked in its manifestations upon the young both mentally and physically. Tendencies to certain mental and physical diseases are transmitted which require only a certain amount of subjection to exciting causes to develop them in all their virulence. Take for instance temporary alienation, or mental aberration, so often transmitted from parent to child. Is not this as much a mental as a physical influence? Hysteria is another disease, in many cases, manifesting itself only through its mental phenomena. Likewise spasm and epilepsy, which for a while derange and eventually destroy the mental power of the individual. It may be contended that all these diseases are transmitted to the cell as a result of a physical habit of body existing in the parents of the undeveloped child. But these diseases of the parent in many instances only manifested themselves in

deranged mental powers, and then only temporarily. So of other mental characteristics which children are known to possess in common with their parents. But why should the original cell be more affected by maternal influences than the fecundated ovum, when the anatomical relations are not so intimate and the food supplied by the mother is infinitely less? The broad fields of medical analogy only answer "Why?" The ovum lying in the ovary is nourished by the same blood, the supply of which is regulated by the same sympathetic system. The relation is no more intimate at first than at last; but in pregnancy the supply of blood to the fetus is so great that the organs of the mother are all worked to their highest capacity, that the embryo may be properly nourished.

We have thus attempted to show what is already conceded by our highest authorities, that both the ovum and zoosperm are affected by the mental condition of the parent, and that by the combination of the two in the uterus a being is formed partaking of the nature of both. Combe, in his immortal work on the "Constitution of Man," advises parents of certain temperaments to await certain mental conditions before copulating, if they desire children to manifest certain traits. He further advises pleasant surroundings, to produce mental influences of a cheering nature upon the female while pregnant. He believes in the mental transmission of parental traits to the ovum and maternal influences during pregnancy affecting the embryo, and was among the first writers to call attention to the class of diseases which affect children who are begotten during intoxication. When we have treated of the influence of passions over the secretions of the various organs, we think it will appear how mental states may affect, deleteriously or favorably, the original male cell and the female ovum.

A class of influences which demands our consideration in this connection, is the influence of mental sensations upon adult organs. A savory odor, if hungry, produces a

copious flow of saliva. Pleasing strains or gentle music, acting, or tragedy, lifelike in its nature, causes the shedding of tears. I think it is Mac Nish, in his Philosophy of Sleep, who speaks of the frequency with which soldiers who are marshalled for battle are compelled to urinate. In some instances the sphincters are relaxed and the bowels evacuated. The animals, or many of them lower than man, perform the sexual act through the mental impression produced by the sense of smell. How often does fear bring out a copious perspiration upon the body and brow of man; and there are well authenticated cases of hair turning white in a few hours through fright. Sorrow and joy are both said to kill—a fact which poets and novelists have long availed themselves of, and used in their productions with thrilling effect. Richardson, in his Diseases of Modern Life, elucidates at considerable length the influence of the passions of anger, hatred, grief, fear, desire and love upon the animal economy. Not only do mental conditions exert a marked influence over the animal organs, but that impress extends to fluids already secreted and lying *in situ*. Carpenter says: "Although we are continually witnessing indications of the powerful influence of emotional states upon the qualities of the mammary secretion, yet it is probable that such influence is not at all peculiar to the milk; and that we only recognize it more readily in this case because the digestive system of the infant is a more delicate apparatus for testing it than any which the chemist can devise—affording proof, by disorder of its function, of changes in the character of the secretion which no physical examination could detect." He quotes Sir Astley Cooper as showing that in "*tranquil states of mind* the secretion of milk proceeds best, and agrees with the child. A *fretful temper* lessens the secretion, makes it thin and serous and produces griping. *Fits of anger* produce irritating milk, which causes griping and produces green stools. *Grief* diminishes the secretion, and renders adventitious aid

necessary for the child. *Fear* will for a time check the production, and *terror* instantly stops it." Those passions which are sources of pleasure when moderately indulged, will when carried to excess alter and eventually check the secretion of milk.

Take the following cases from Carpenter: "There is evidence that the mammary secretion may acquire an actually poisonous character under the influence of violent excitement. A carpenter fell into a quarrel with a soldier billeted in his house, and was set upon by the latter with his drawn sword. The wife of the carpenter at first trembled from fear and terror, and then threw herself furiously between the combatants, wrested the sword from the soldier's hand and broke it in pieces. During the tumult some neighbors came in and separated the combatants. While in this state of strong excitement the mother took up her child from the cradle, where it lay playing in the most perfect health, never having had a moment's illness. She gave it the breast. and in so doing sealed its fate. In a few moments the infant left off sucking, became restless, panted, and sank dead upon its mother's bosom. The physician who was called in found the child lying in its cradle as if asleep. All his resources were fruitless; it was irrevocably gone."

Take another case: "A lady having several children, all healthy, her youngest an infant a few months old, heard of the death of the child of an intimate friend, from acute hydrocephalus. It made a strong impression upon her mind, and she thought upon it much. At that time she was separated from the remainder of her family, and was alone with her babe. One morning after nursing it she laid the child in its cradle, asleep and apparently in perfect health. Her attention was shortly attracted by a noise, and going to the cradle she found the child in a strong convulsion, which left it dead." Says Carpenter: "Although the influence of mental emotion is less unequivocally displayed in this case than in the former, it can

scarcely be a matter of doubt, since it is natural that no feeling should be stronger in the heart of the mother than the fear that her own beloved child should be taken from her, as her friend's had been. And it is probable that she had been particularly dwelling upon it at the time of nursing the infant that morning."

Mr. Wardrop, in the *Lancet*, mentions: "Having removed a tumor from behind the ear of a mother, all went well until she fell into a violent passion. Her child being suckled soon after, died in convulsions." He was sent for hastily to see another child in convulsions, produced by taking the breast of a nurse who had just been severely reprimanded." "Sir Richard Croft had seen" many similar cases. The poisonous nature of the human bite inflicted under the influence of anger is well known. And we can now see, from the influence of mental conditions upon the secretions of the mammary glands, the manner in which mental influences may act upon the ovule and zoosperm of the parents at the time of impregnation. These facts are also redolent with suggestions concerning the proper nursing and the etiology of obscure nervous diseases in children.

But another evidence of the influence of mind over matter, when acting without physical or nervous connection, is to be found in the state expressed by the term "*mesmerized.*" Here the mesmerist substitutes his own mental force for that of the subject, and controls the subject's physical actions with the certainty and precision with which a balance wheel regulates a watch. Many persons in this condition can be made to perform any number of simple and foolish acts. Their entire natures may be changed—the profane pray, the religious swear; the poor man is a prince, the rich an abject beggar. The mesmerist can convince them they are burning, drowning, flying, swimming, sailing, courting, or in any other absurd position, while under his influence. One of the most wonderful manifestations of this power I have ever wit-

nessed was given by Hartz, a magician, who visited this city some months ago. He was accompanied by a young woman, whom he would place upon the stage blindfolded. Upon a black board, which was located behind her, he would write a number or series of numbers, whose value she would name as fast as written.. In a column of numbers any particular number might be demanded, and she would name it, or any particular digit of a number. The sum of any series of numbers would be given by her as quickly as the wizard would add them. There was no collusion, as the numbers were written by citizens in the audience and given to Hartz. The same facts were true of any word or sentence which might be written by the magician. Hartz would pass through the audience and ask for articles carried about the person, which she would name correctly. If a watch, she would tell the make, the number, the character of works and the time of day, but unless Hartz himself knew the article she was unable to tell; anything which he failed to recognize she was unable to name.[1]

Another traveler, who claimed to be a spiritualist, requested any person to write a word or sentence upon paper, fold it up, place in the palm of his left hand, and apply it to his (the spiritualist's) forehead. In the meantime he clasped the writer's hand, and then closing his eyes would appear as if fixed in deep study. In many cases he was successful in reading the word or sentence, in others only partially. These facts are mentioned to show that mind can exert an influence upon a distinct human system, even when there is no direct nervous connection. Does it not seem more reasonable that mental conceptions of the mother can manifest their power upon the embryo?

[1] In *Scribner's Monthly* some three or four years ago appeared a paper describing and explaining these phenomena and showing that there *was* collusion between the so-called magician and the blind-folded assistant, and a complex system of signaling between them in all their public exhibitions.

It is contended by those who do not believe in maternal influences, that all abnormalities or anomalies in the growth of the fetus can be accounted for upon physical grounds. I have read several of these sceptical papers recently, but the one of the most scientific value is from the pen of E. P. Murdock, of Chicago, and is really an able paper. His subject is "Teratology." Reviewing in brief the early superstitions of the Egyptians, Greeks and Romans concerning monsters and their etiology, he denies the influence of maternal impressions on five different grounds, which I shall mention and consider *seriatim.*

He says, First: "Malformations of the most peculiar nature are found in the lower order of animals, such as echinoderms and crustacea, where no mental impressions could have existed." To this we answer by agreeing with his conclusions; that if there is no mentality there can be no mental impression. We coincide.

Second: "Malformations in the human species do not correspond to the mental impressions of the mother." Nor does it follow that they always will. An abortion produced by fright can not be said to correspond with the mental impression of the parent, yet the mental condition created it. The effect upon the fetus need not necessarily correspond in appearance to the cause which modifies it. It may or may not correspond, according to the manner in which the mental influence is transmitted.

Third: "What we call the lowest order of monsters, the acephalous, have been born with a well-formed child, where the mental impression, if any ever existed, would have acted upon both." To this we answer, that this fact may be due to one of the many other causes tending to retard embryonic growth, aside from mental influences. Nor do we think that it necessarily follows that nervous impressions would be equally strong upon both children, as we shall attempt to show before finishing this paper.

Fourth: "The fetus, when a germ, is completely sepa-

rated, as to its vascular and nervous connections, from the mother. This is still more clearly shown in the ovipara, where malformations and peculiar markings are quite prominent in birds and reptiles." We have already shown there is no vascular or nervous connection between the fetus and the mother. In the ovipara a large supply of food is stored up for the young. With a proper heat supply, the germinal vesicle has only to nourish itself, and the process will go on equally as well in an incubator as under a sitting hen. The ovum here is cast out equipped for its future development, wanting only warmth. But in the human ovum two organizations must be considered: the parent must furnish food—the child must abstract it. Derange the food equilibrium on either side of the line, and arrest or over development follows. What regulates the food supply? The nerves of the mother. Do the nerves of the mother ever respond to mental conditions?

Fifth: "Fright and other mental impressions of an alarming nature disturb almost every woman during gestation, so much so that the fear the child will be marked is the common bugbear of the sick room. The fear of deformity from mental impressions which have actually occurred is the rule instead of the exception, while the actually deformity is the exception instead of the rule." All of which contains some truth. It would indeed be a sad thing if all who have mental impressions or conceptions were to transmit them to their offspring. Yet it is true that many persons are possessed of a much more impressible nervous system than others. Would not their offspring be more impressible, and liable to respond to the mental conditions of the parent? And again: Many sensations are stronger than others, and but few mothers are ever compelled to pass through the same precise test in order to show whether the influences in each case would be the same. If, as he says, "the actual deformity is the exception instead of the rule," and that deformity should

be shown in any given case to have originated through the mentality of the parent reacting on the embryo, his whole case falls to the ground. For any such case would become a precedent, and under similar circumstances similar results might be anticipated. Every fact in nature is law within itself—a cause or a consequence—not to be overlooked or derided.

Murdock accounts for all malformations upon four grounds: "Defective germs. 2nd, Defective fission in the development of the vitelline membrane, or its primitive traces, i. e., there may be two neutral axes instead of one, or the one may be incomplete. 3rd, Arrest of development. 4th, Excessive development."

How do defective germs originate? Upon what do they depend for perfection? Upon the parent. What controls their growth? The vascular and nervous systems. Do mental conditions ever modify the cell productions in the organs of the human body? They do, as we have previously shown. From the dawning of life in the cell to its perfection in the human animal it is subjected to the influence of mentality. The second cause is only a modification of the first and third or fourth. If the cell is defective, either from arrest of development in its cell life or excessive development during that time, it has evidently been subjected to the same influences. The third and fourth causes have to deal with intra-uterine life and its laws. Want of development may be due to an incapacity to abstract the necessary food supply for vigorous growth upon the part of the fetus, or a limited food supply upon the part of the mother. The original defect in the ovum may be due to Dr. Murdock's first cause. The limited food supply on the part of the mother may be due to mental or other causes. The same, only reversed so far as the food supply is concerned, may be stated of excessive development.

I have thus closely followed Dr. Murdock's paper, because it contains all the objections that have been urged

in the other papers of those who coincide with him, and they are more scientifically arranged.

From the fact that the human embryo is fully formed by the end of the 15th week, it is contended by these writers that if maternal influences modify the growth of the fetus it must be done prior to that period. They claim that placental adhesions, intra-uterine amputations, amniotic bands (and one writer says intra-uterine peritonitis), may modify the growth of the fetus. Now those who advocate the doctrine of maternal influences do not deny all or any of these factors. They recognize the fact that there is a certain class of causes originating within the ovum itself which may modify its form and prevent the formation of a perfect being. These may be called *fetal modifying causes.* Others which affect the appendages of the fetus may be termed *modifying causes originating* in the *fetal appendages.* Other causes dependent in the mother, upon causes separate and distinct from mentality, might with propriety be termed *maternal modifying causes,* and those which are dependent upon mentality might be known as *maternal mental modifying causes.*

The first and second causes affect growth only through the mode in which the fetus and its appendages perform their work. They may therefore be left out of consideration.

As I have shown, nervous influences modify the action and function of particular organs in the adult, and also their nutrition. Particularly do many women suffer from mental impressions during the period of pregnancy. Vague dread takes hold of the mind, and makes them fretful and uneasy. Surprise or shock reacts upon their uterine system. Unpleasing objects fill them with disgust and fear. Terror, through the nervous system, modifies the action of the heart, and doubtless has its effect upon the blood supply passing through the uterine arteries. In this way we can account for many deformities excessive or deficient in their nature. Says an eminent physiologist:

"A strong and persistent impression upon the mind of the mother produces a corresponding influence upon the development of the *fetus in utero*." And again: "It can not fully be thought improbable that the developmental processes of the embryo should be powerfully affected by strong emotional excitement on the part of the mother."

Carpenter cites the following from Dr. Combe as the result of maternal influences upon the fetus, produced by the Siege of London in 1793: "In addition to a violent cannonading, which kept the women for some time in a constant state of alarm, the arsenal blew up with a terrific explosion, which few could hear with unshaken nerves. Of ninety-two children born within that district in a few months afterwards, Baron Percy states: 'Sixteen died at birth, thirty-three languished from eight to ten months and then died, eight became idiotic and died before five years, and two came into the world with numerous fractures of the limbs—fifty-nine children out of ninety-two, or nearly two out of three, actually killed through the medium of the mothers' fright.'"

Those anomalies which form a peculiar mark upon the body of the child are evidently but a small portion of the cases attributable to mental influences. A long and interesting discussion occurred in the St. Louis Medical Society upon this subject, May 7, 1881. In this discussion the great majority of the physicians present recorded themselves as believers in maternal influence and their capacity for modifying the growth of the fetus. The following interesting case was reported by Dr. Fairbrother: "A woman of good, honest character gave birth to a child minus two fingers of the right hand. She said she expected it. She was not surprised at all, as when she was three months pregnant a neighbor living next door came in whose hand had lost two fingers, which fact she had never noticed before. The amputation of the child's hand corresponded with that of the neighbor." The writer knows of a similar case, which occurred in the history

of a lady now resident in this state, who was born in the days of slavery. While her mother was pregnant, a slave woman who was ironing burnt her hand severely. The middle, ring and little finger, only a portion of the last, were the parts involved. The slave came to her mistress for relief, and she devised such local applications as were necessary and bandaged the hand. When her child was born, some four or five months later, the middle, ring and a portion of the little finger were wanting, corresponding exactly to the burnt portion of the negro woman's hand. Nor was this lady surprised, as she had spoken frequently of the shock caused by the condition of the slave's hand, previous to her confinement.

A prominent eclectic physician's wife, who resided in Illinois during the war, became pregnant. One day she had occasion to go into her husband's study. She was shocked when she entered to find him engaged in the study of anatomy and holding a skull in his hands. When the child was born it had no eyes, had well formed teeth, and a face closely resembling the human skull. It lived a few moments and then died. The anomaly was attributed to the mental shock produced.

Another case from the personal experience of the writer: Several years ago I was called to see a boy who was suffering with congestive fever. I found him very ill and occupying the same room with his mother, who was shortly to be confined. She had been confined three times previously, and all her children at delivery were strong and healthy. The boy was the mother's pet and idol, and during the night he died. It preyed much upon the mother, and she was nearly crazed with grief. She expressed a fear, when she grew calm, that her expected child would not be right. I tried to soothe her, but she was firm in her conviction. In three weeks after her son's death she was confined, and had an easy labor. To all appearance the child was perfectly formed. In a week or two I learned that all was not right. The mother com-

plained of its inability to suck. In a few months it had convulsions, which were relieved by nervous sedatives. A year ago the child was four years of age, and had not learned to speak or to walk. The child was semi-idiotic. Evidently, it appears to me, this must have been a case of maternal influence.

In the discussion of a paper upon this subject, read before the Moberly District Medical Association by the writer, Dr. A. E. Gore, President of the Missouri State Medical Association, cited the following: "Many years ago I knew a lady who, while pregnant, was chased by a pet coon, and if I remember rightly the coon sprang upon her right shoulder. She was much terrified. When the child was born, over the right shoulder and along the neck it was covered with a hairy growth as much resembling that of a coon as two peas resemble one another." Dr. J. P. Vaughn, of Glasgow, also related this case, which occurred in his practice: "I was called to see a little boy whose forehead was bleeding profusely from an injury produced by a door key. His mother had opened the door suddenly. The boy was on the opposite side, and the key, which was in the lock, came in contact with his head, cutting it. The mother, who was pregnant about eight months, was so much shocked that I feared immediate miscarriage, but I made her go to bed, and by the aid of nervous sedatives kept it off for eight days, when, in spite of all I could do, she was delivered. The head of the fetus, from a point on the forehead corresponding with the injury of the boy, was as clearly gone as though cut with a knife—so clearly defined as to appear of very recent origin." It is almost unnecessary to comment on these cases. They speak louder than words.

But how are these changes in the fetus brought about? What system accomplishes the modification? Laying aside *fetal modifying* causes, and *modifications* produced by the *fetal appendages*, I believe they are produced in two ways.

And first I accept the theory advanced by Carpenter, Dalton, Tuke, Hammond, Seguin and Richardson, *et al.*, of the capacity of the blood to modify the embryo. They teach that maternal impressions, acting upon the nerves, so modify the blood that an impression corresponding to that of the mother is made upon the fetus. Dr. Walter Coles, of St. Louis, in a recent valuable work entitled "Nurse and Mother," has also mentioned this influence. I accept this doctrine in the great majority of cases, but not all.

Another influence, which I consider as potent in producing these anomalies as disturbance of nutrition, I would denominate, for want of a better term, neurolysis. If we take the helix of an electrical battery and surround it with one of larger size, and pass a current of electricity through the larger helix, although there is no direct electrical communication between the two, a corresponding current, weaker in its manifestations, will be found in the enclosed helix. Now the mother is the larger helix, the fetus is the smaller. The nerves of the mother and of the child are in close proximity. A mental impression upon the brain of the mother passes with the speed of nervous force to the uterine system of nerves; its influence is received by the fetal nervous system, and manifested upon the fetal body.

The class of cases which are modified by neurolysis I believe to be those in which changes occur too rapidly to be brought about by the blood.. I will cite the following: Dr. Dewey, of Keytesville, Mo., in an article upon this subject, cites a case (published in the *American Journal of the Medical Sciences*) which occurred in Pennsylvania, and which attracted the attention of the profession then. The clothing of a pregnant woman by some means took fire, and she was horribly burned about the pubes and abdomen. In two or three days she was delivered of a still-born child, on whose body were blisters, as if produced by fire, corresponding to the parts burned upon the body of

the mother. Another case, related by Dr. T. A. Martin, of Dalton, Mo., of a woman who was severely burned about the legs. The shock was so great that she miscarried in six hours. The corresponding parts of the fetus were blistered, and had the same appearances as those of the mother.

Now evidently these are cases of profound nervous shock, and the rapidity with which these changes are brought about would indicate that the mark must be produced almost instantly. The neural influence generated in the brain of the mother modifies the nerve action of the uterus. The nerves of the child respond. The sensitive tissue, like the chemically prepared plate of the photographer, responds. It is the pain which the mother suffers by which she refers the trouble to the proper seat of the disease. The nervous system of the fetus receives that impression, and transmits to the parts corresponding with those which are affected in the mother. Like two chords strung in unison, if we strike one the other vibrates; so the fetus responds to the maternal tension. The surrounding circumstances of the mother make or mar the child.

It is asserted by those who oppose these views on maternal influences that the fetus is fully formed in fifteen weeks, and hence that if these influences exist they must occur before that period. But they should not forget that the membranes surrounding the fetus are both secreting and excreting in their nature. If any effete materials are developed, the placenta will remove them. They are absorbed. In this way we can account for intra-uterine amputations in which the arm or leg is wanting. It has been asked, why do we not hear of the absorption of the dead fetus? For the simple reason that the cases are not analogous.

If by any means, shock or otherwise, an influence is generated, destroying the vitality of any organ or extremity not essential to the vitality of the fetus, the vital

processes will still go on. If the supply sent to that part fails, the part will wither, and be absorbed by the still active membranes, as in adult life in cases of gangrene. But anything which destroys the life of the fetus destroys the activity of the membranes. If the secretion and excretion are not coequal, death must ensue, and the only thing nature can do is to cast them off.

Thus I have attempted to show, from the analogy of heredity upon the ovum, from mental influences upon adult organs and their power over secretions lying in situ, from the fact that the nourishment of the ovum is dependent not only upon itself but the mother, from scripture history and the observations of breeders of stock, from mesmeric influences and the observations of our most prominent physicians and physiologists, and the similarity existing between certain electrical phenomena and nerve force, that maternal influences do impress the child.

And now I almost fancy I hear some critic asking, "Cui Bono? Of what good? Of what value?" Merely this: The right degree of caution to be enjoined upon pregnant women. The avoidance of particular states and conditions of mind. The withdrawal from all that is terrifying and disgusting, and a calm and cheerful hope in that future through which she must pass to reach the glorious gateways of maternity.

THE HISTORY, UTILITY AND VALUE OF THE CLINICAL THERMOMETER.

BY I. H. BRIDWELL, M. D.

[*Read before the S. E. Missouri Medical Association.*]

THE clinical thermometer, as you all know, is generally regarded as comparatively a new means of diagnosis and prognosis; but upon investigation we learn that as far back as 1754, one hundred and twenty-nine

years ago, one Antonius De Haen, the first clinical teacher of medicine at Vienna, insisted upon its use to determine accurately the temperature of the body. But though De Haen showed that it was the only correct index of heat and seemingly indispensable in diagnosis when it was desirable to determine the temperature, he was not able to convince the profession that it was desirable, and, therefore its use lapsed with his death. Hippocrates insisted upon the examination of the heat of the body by such means as were in use in his time; and the use of agents that would elevate the temperature when depressed, and lower it when elevated. The use of the thermometer has been revived within the last twelve or fifteen years. The first one I ever saw was in 1871, bent at an angle and fixed upon a piece of board two inches wide and about fourteen inches long, non-registering. I thought it would be nice to fascinate patrons with, if I could have a horse and buggy to carry it around. There is great improvement in them now; they belong to the armamentarium of every enterprising physician, and they are employed as a most valued means of diagnosis and prognosis. It is valued now because we appreciate the fact that the vital processes can only be performed in perfection at the temperature of 98½°, and just in proportion as it varies from this, either above or below, they are changed or are entirely arrested. Indeed it would seem that heat at this degree is the most essential condition of life, and that if there be a variation from it, those means which would restore the normal equilibrium are the most direct and of the greatest importance. The standard temperature of the healthy body is 98½°, and is subject to slight variations during the day.

Observations have shown that the normal heat may be considerably altered by a number of collateral circumstances. But the great distinction between these alterations of temperature in health and those which are the result of disease is, that these variations are generally

temporary and within narrow limits, amounting to mere fractions of a degree, whereas those which are due to disease are persistent so long as the disease exists. There are many collateral circumstances which influence the normal heat in our daily life, and which require to be remembered in order that erroneous conclusions may not be drawn from the thermometric indications. We have to study both increase and decrease in the temperature of the body, the first being of most common occurrence and having the greatest range. Thus whilst a decrease of but one degree, if maintained for a considerable time, will result in death, an increase of four to six degrees may be maintained for a month with safety to life. The increase of temperature is usually proportionate to the frequency of the pulse, one degree corresponding to an increase of ten beats per minute. Thus:

With	a	temperature	of	98°	we	have	a	pulsation	of	60.
"	"	"	"	99°	"	"	"	"	"	70.
"	"	"	"	100°	"	"	"	"	"	80.
"	"	"	"	101°	"	"	"	"	"	90.
"	"	"	"	102°	"	"	"	"	"	100.
"	"	"	"	103°	"	"	"	"	"	110.
"	"	"	"	104°	"	"	"	"	"	120.

This table is for adult males of good development, and will not apply to those of feeble constitution, sedentary habits, or of nervous temperament. In such, with a normal temperature of 98½°, the pulse would be 70 or 80, and the increased frequency to each degree would be but six or eight, until the 103° shall have been reached, when it will correspond with the foregoing table.

In chronic diseases we also find an increase of temperature, and the thermometer becomes almost as certain a means of diagnosis and prognosis as in febrile and inflammatory affections. Thus, for instance, in phthisis pulmonalis, we find a permanent increase of temperature to 99° and 100° in the first stage, increasing to 101° and 102° as the disease progresses. This increase is so uniform

that it furnishes one of the best evidences of the nature of the disease in its earliest stage.

The frequency of the pulse corresponds to the increase of temperature. Breaking down of the tubercle is announced by a marked increase of temperature, corresponding to the destruction of lung tissue and danger to life. In acute fevers and inflammations we find the temperature increasing in the ratio of the severity of the disease. It does not however remain the same uniformly throughout the twenty-four hours, but presents a marked morning decline and evening elevation. This is very distinct even in continued fevers, which we are accustomed to think of as being uniform in all their phenomena. This fluctuation is rarely less than one degree, and is frequently two degrees or more. The value of the thermometer as a means of diagnosis is thus estimated by Dr. Aitkin: "In the course of many diseases whose diagnosis has been accurately determined, if the temperature departs from its typical range the thermometer will furnish the best and earliest indication of any untoward event, such as the additional development of disease, or other visceral complication in its course."

When once the typical range of temperature is determined, a basis is laid for appreciating irregularities or complication in its course in particular cases. For example, a patient exhibits symptoms of fever of the typhoid type, but during the progress of the first week his temperature becomes normal, for however short a space of time. The occurrence of this event proves that the fever is not what it was supposed to be. Again, a patient may suffer from all the general symptoms of incipient pneumonia, but there still is a doubt as to whether infarction of the lungs has taken place; the sputa being suppressed, or not procurable, cannot assist the diagnosis. If, however, the temperature is found to be normal, it is certain that no croupous exudation has taken place in the lungs, and that there is no pneumonia. Again, a tuberculous

patient, having a sudden attack of hemoptysis: if the temperature of the body is normal during and subsequent to the attack, no reactive pneumonia, nor any exacerbation of the tuberculous exudation, need be expected. Again, in all cases of convalescence, so long as the defervescence progresses regularly, as measured by the temperature, no relapse need be feared; on the other hand, delayed defervescence in pneumonia, the presence of a high evening temperature in typhoid or typhus fever, or the exanthemata, and the incomplete return to a normal temperature in convalescence, are signs of great significance. They indicate incomplete recovery, supervention of other diseases, unfavorable changes in the products of pathological disturbances requiring to be carefully examined into.

The onset of even a slight elevation of temperature during convalescence is a warning to watch over the patient carefully, and especially to maintain due control over his diet and exercise. The increased temperature, with a rapid, feeble pulse, indicates diminished vitality, but with a full bounding pulse the onset of inflammatory action. All men know that a hot body is associated with impairment of all the functions of life. All who have studied the temperature know that as enfeeblement increases, the pulse increases in frequency and loses volume; and the respirations increase in frequency, and become short and feeble until life is extinct. Therefore it is as clear as anything can be, as runs the temperature so runs the disease—near the standard, 98½°, well; away from it, ill; remedies that look to a normal temperature, good; remedies that allow it to run high, bad.

The temperature should be kept as near 98½° as possible, certainly below 103°. To this end baths and remedies which influence the skin, sedatives and remedies specially influencing the nervous system, and calorification, should be carefully studied.

The clinical thermometer I commend to your careful

study. Make it your friend of daily, almost hourly consultation; procure one of the best quality, test its accuracy frequently upon yourself or other healthy persons that you may know of its accuracy, and it will never deceive or *fool* you, as Prof. Flint intimates that it may. Make a register of the temperature each day as often as you visit your patient. It increases his confidence; it leads you to a closer investigation and study of all the details of your case. From this study you arrive at a more accurate and better understood medication.

COMPARATIVE MORTALITY, INSURABILITY AND PROCLIVITY TO DISEASE IN THE TWO SEXES.

BY P. V. SCHENCK, M. D., *Clinical Lecturer on Gynecology, Mo. Med. College.*

[*Read before the Missouri State Medical Association, May 17, 1883.*]

(Continued from the August COURIER).

DEVELOPMENTAL DISEASES form a large number which belong exclusively to the female sex. Under this head come the fatalities of child-bearing, the puerperal diseases. The only way to view it will be to form for each sex a set-off—a counter-balancing influence for good or ill. As far as this class refers to children, it is shown that the male sex largely predominates. Only two orders need consideration, first, old age, second, nutrition.

Old Age.—As they grow older, both sexes feel that wear and tear of life which impairs the structures of most of the organs. The female sex form by far the larger per cent. of cases of senile decay. A late writer has truthfully remarked that the little said about women in works on diseases of old age is a striking proof of the good health with which they are generally blest during the last stage of ex-

istence. In most of them they have to a certain extent been remodeled at the change of life. A new life impulse, a new life policy has been granted them. Women live longer than men. As it is the hardening of the oak, the prevention of the entrance of nourishment, that causes the center first to decay, and ultimately the whole tree to perish; so in women the bones, the cartilages and the muscles, as well as every other part of the body, are softer and less solid than those of men. They must require more time in hardening to that degree which causes death.

Next let us look at violent deaths. Man more exposed meets more *fatalities*. Boismont has shown from extensive statistical research that in France three men commit *suicide* where but one woman does. Men become more weary of life, they have a greater desire to escape its burdens. Women cling to life even under the most wretched conditions. It has been truly said that she bears her loneliness better. Religious restraint has upon her a firmer hold, and she possesses to a greater degree that hope which springs eternal in the human breast. Among a million of persons, according to Morcelli, of each class in Europe, the following numbers committed suicide: Married men, with children, 203; married men, without children, 470; widowers, with children, 526; widowers, without children, 1,004; married women, with children, 45; married women, without children, 158; widows, with children, 104; widows, without children, 238. Women are less likely to die from the use of anesthetics than men, the proportion according to Snow is 3:2; Scouther 2:1; Kidd 4:1; Lawson 28:1; the report of the investigating committee 72:37.

The zymotic diseases, which carry off nearly twelve per cent. of the human family, form an important class, and a preponderance of either sex will make a strong link in the previous evidence. Most of these affections are called by sanitary writers preventable, and especially those of miasmatic order. Under this important order of the class comes one of the most prominent diseases of the puerpera,

namely, puerperal fever; but this disease, though so much feared in the lying-in room, allows, of course, of no comparative statistics. The fatal cases from it form but a small per cent. of total mortality. From the last United States census, we find only 1,828 cases recorded of this disease, out of a total mortality of 492,263, and of the total of the female sex of 231,590.

Cholera.—It is generally believed that the male sex suffers more frequently than the female.

Diphtheria.—Alber states that diphtheria attacks each sex equally up to the fourth year of age; after that it is more frequent in boys than girls.

Erysipelas.—Facial erysipelas is more frequent (so said) among females, and especially during menstruation, but this relation is not proven by statistics. Henck Bird enumerates among two hundred cases the males were in great excess, a ratio of 147 : 113. Of the fatal cases in England, between 1862 and 1868, the male sex numbered fifty-six per cent.

Diarrheal Disease.—Men suffer oftener than women from diarrhea, at a ratio of 5 : 3; habits of eating and drinking to excess cause this preponderance. Dr. Wood once remarked that more men died from rail-road eating than from rail-road accidents.

Hay Fever.—In this simple disease, which is so aristocratic, and which some have considered to be hysterical in character, the female is out of proportion less frequently affected than males. Phœbus reports a ratio of 50 : 104.

Malarial Diseases.—Men are more liable to the severe forms of *pernicious* and *remittent* fever, while women are more likely to be subject to *masked intermittent*, especially showing itself as neuralgia in the branches of the trigeminus nerve. There is a certain degree of immunity against malarial affections during pregnancy, and the puerperal condition. Quadet claims that during the epidemic at Prague he saw only two cases of intermittent fever among 8,639 pregnant and puerperal women. Men, under all circumstances, are far more liable to malarial affections; the excess of males as affected by these affections has an important bearing upon life risks for that quality of vitality which, and not health, is the question for the insurance of-

fice. Persons who seem at the point of death yet live for years, while those who seem the most vigorous are as subject as any to quick death.

The order of enthetic diseases furnishes but a minute per centage of mortality, but even here the male sex retains a preponderating excess.

Hydrophobia.—Males compose sixty per cent. of the entire number of those attacked. Of 2,021 individuals dying from hydrophobia, 1,218 were men, and 803 were women.

Syphilis.—Sex exercises no difference in reference to the susceptibility to syphilis, yet it decidedly affects its type, and again comes in the tendency in females to functional nervous diseases.

The next order, the dietetic, is of great interest; especially that part which relates to alcoholism.

Alcoholism.—Men are specially liable to the habit of intemperance. Neison shows there is one drunkard to every seventy-four of the male population, and one to 434 of the female population. The average duration of life after the commencement of intemperate habits among beer drinkers is 21.7 years; spirit drinkers, 16.7 years; indiscriminate, 16.1. The majority of deaths from intemperance occur between twenty and forty-six years of age. Each year in New York there die, directly or indirectly, from intemperance, 826 persons. Of this number 263 are females and 563 are males. Intemperance reduces the expectation of life more in the upper classes than among mechanics and tradesmen. 72.38 per cent. of drunkards die from diseases of the brain, digestive organs and respiratory organs. The number of deaths from intemperance is constantly increasing. In the present day it is not only a matter of quantity that people drink, but its adulteration must be taken largely into the account. Alcohol not only affects the customer of the bar room, but statistics show that of all occupations the highest rates of mortality occur in beer shop and inn-keepers. For the male population between 21 and 30 years of age there is one drunkard in every 176 persons; between 30 and 40 years one in 80; between 40 and 50 years one in 57; between 50 and 60 years one in 52; between 60 and 70 years one in 64; between 70 and 80 years one in 253.

The following list shows the effect of intemperance upon chance of life:

Having reached the age of	Has an average chance of still surviving	But the intemperate have an average chance of surviving only
20	44.31 years.	15.53 yrs on 35 p.c. of duration of gen'l pop'n.
30	36.48 "	13.80 " 38 " " " " "
40	28.79 "	11.62 " 40 " " " " "
50	21.25 "	10.86 " 51 " " " " "
60	14.28 "	8.84 " 63 " " " " "

What Dr. Gauthier said in reference to England is true in reference to this country. Alcohol is more ruinous than a pillage of our largest banks and is more fatal than the bloodiest battle field. Neither Moloch nor Juggernaut, nor any other heathen idol, was ever worshiped with such cruel and costly sacrifice as is offered year by year to the demon of drink.

The next important class is that of the constitutional diseases. The average mortality of this class to total mortality from all causes is 22.56 per cent. In this class is cancer, a disease which is fatal, occurs more frequently in the female sex, and has, as we are taught, a special proclivity to attack the female genital organs. Under this division we also have phthisis, which, as I have shown, is so essentially fatal in the female sex during the decennial period of life, from ten to twenty years, a disease which, as to the proclivities of the sexes, has afforded much dispute, so that, as Morton, after a careful examination, states, he is unable to venture an opinion on the influence of sex, even though most authors consider women more liable to phthisis than men. The first order of the constitutional class is the diathetic.

Gout.—Gout seldom affects women, and this disease takes off more than three years of life expectation.

Rheumatism.—Articular rheumatism is much more frequent in men than in women, because they are more exposed. The uterine function has an influence in its development only as it produces chlorotic conditions, and then it may produce the nodular form. But this is not fatal and apt to end in deformities. The occupations of men predispose them to rheumatism more than women. The compar-

ative list will be as follows: *Sebert* places 119 men to 111 women. *Wunderlich* places 65 men to 43 women.

Anemia.—Experience shows, though there are no statistics to prove it, that the tendency to morbid anemia is greater in the female than in the male. Valentine has shown that the total volume of blood bears a smaller average proportion to the body weight in women than in men. Women are able to bear anemia longer and better than men. Men have an inferior tolerance to the disease. They resist less the influences of inanition, and the intense and extreme forms of anemia are more destructive to the male than to the female.

CANCER.—While, as a general rule, cancer is more frequent among women than men, yet, outside of the frequency in the female genital organs, cancer in the organs which are common to each are more frequent in the male. The uterus and mammæ are more frequently the location in females, while the digestive organs, bones and skin are the most frequent location in males. From the reports of the Krankenhaus, at Vienna, we learn that out of 34,523 deaths between the years 1858 and 1870, 1,874 were from cancer, which is 5.4 per cent. With this, the Geneva list and London statistics agree. In England, during 1872, the deaths of males from cancer were 2,252, of females, 5,140. As a rule, cancer is from one-half to one-third more frequent in females than males. A record of 9,118 cases in Paris shows that the disease was seated in the uterus in 2,906 cases, and in the mammæ in 1,149 cases. The per centage of deaths from cancer to total mortality is 1.64. Deaths in New York city during five years, make a total of 1,701. Of this number 1,228 were females, and 478 males; 453 were from cancer of the uterus, and 222 cancer of the breast. Of all the cases of cancer in the female the uterus is affected in two-thirds. The epithelial form of cancer is that which in almost all cases is witnessed in the tongue, and is much more common in males than females. In the collection made of cases reported by Maisonneuve, Thiersch and Weber, the ratio stood as 50 : 7.

Cancer of Tongue.—The majority is considerable with the male sex, 62 : 16.

Cancer of Esophagus.—Male sex more liable; 11 : 4.

Cancer of Stomach.—Wilson Fox shows the males in excess, 680 : 623.

Cancer of Intestines.—Males, 10; females, 8.

Cancer of Kidneys.—Males in excess, 38:18.

CANCER OF PERITONEUM. — Females preponderated, 24:16.

Cancer of Pancreas.—Males in excess: Da Costa, 24:13; Ancelet, 102:59; Bigsley, 16:12.

The next order is tubercular, which carries off 19.39 per cent of the human family.

Phthisis.—During fifty-four years in the city of New York we find the per cent. of those who die from phthisis to total mortality from all sources, to be 14.29. The disease in this country is on the increase. In 1850 the percentage from this disease to total mortality from all sources, was 10.37; in 1860, 12.45; and in 1870 it was 14.20. In England, one-tenth of total mortality is from phthisis. There is a greater per cent. of males than females that die from phthisis between the ages of twenty and sixty. Most of the mortality, as I have said before, occurs from this disease among females before twenty years of age. The records of New York city show that a larger number of males die each year from this disease than females, though the census shows that there is an excess of female population to such population of over 30,000. Taking an average of all statistics, the females are never in excess from mortality in this disease after the twenty-fifth year, and after forty years of age more males by far in proportion to population die than females. Though many deny, yet there is a strong impression with the profession that the influence of pregnancy upon the course of phthisis is favorable; that the powerful excitement that the uterus receives at this period subdues the irritation from the pulmonary arteries and stops the impulses of vascular action, directing them into another course. The evil influence of the confinement of the female sex as a factor, is overcome by the occupation of the male.

Scrofulosis.—It is well ascertained that the severe forms of scrofula ending in death, especially those accompanied with affections of the bones and joints, occur with somewhat greater frequency among boys.

Thus, gentlemen, you see that statistics in reference to mortality, and to diseased action, show decidedly in favor of the female sex. Under the etiology of disease, the head-

ing of sex seems almost entirely in favor of the female. With them health is almost as contagious as disease. Man, as the Lord of creation, is too apt to overestimate the superiority of his sex. In the lower orders we know that the male of the lion spider is too insignificant to be noticed, and after fecundating the female she dines upon his succulent body; contact of the male bee with the female is to him instant death. The lioness is as brave as the lion; the bitch is as untiring in the chase as the dog. In the human family we find the laborers among the working female peasants. The squaw is equal to the Indian, and in the South the negresses are as powerful as the negroes. The human female, says Thomas, if properly developed, and placed beyond causes which militate against her physical well-being, would be in no degree the inferior of the male. Yet, there is a femininity about her various organs, and also about her intellectual and moral perceptivity. The nervous system is more delicate, sensitive, and impressive; hence, we have the partial, spasmodic affections; hence, nervousness under some shade or type may be expected; but these ills are not fatal; while, with men, the brain is more active, more exposed to vacillation in nutrition, more exposed to pernicious influences. Men are more immoderate in their pleasures and the use of stimulants. Blows and falls of all kinds are liabilities of the stronger sex. Statistics and authorities show that injuries to the skull are great causes of diseased growths. The avocations of the male have a greater tendency to the production of disease and death. The shoemaker and the tailor contract gastralgia. The gardener has water-brash. The worker in brass has the brass-founder's ague, and the worker in lead has lead poisoning. Consumption among men shows a marked predominance in the centers of the metal and textile industries. The literary life of men has its dangers; there is no thinking without phosphorus. We are told that nothing but daily exercise, temperate meals, and practical observance of regular hours of study and rest could have kept burning the flickering can-

dle of reason in the poor suicidal Cowper. The historian of Kirke White tells us that he died in his youth from the keen poison of his own genius, and the author of The Seasons faded away from lazy and self-indulgent habits. The soul of Burns was drenched in drink and idleness. The literary man becomes hypersensitive to noxious indulgence, as Swift expressed it, when he told Pope that the least transgression of his (Pope's) was a great debauch. The average life of statesmen is only 56 years. The short lives of sovereigns are proverbial. In the whole catalogue of Roman and German emperors, from Augustus downward (200), only four attained the age of eighty, while of three hundred popes only five reached that age. Take commercial life; the working in low offices, the ill ventilated apartment with artificial light, if any; pressing two days into one, so as to be rich in half the time; making a struggle which leads to death, though they call it a struggle for life; working for wealth of purse at the risk of poverty of health. Thus bread-winning ruins the constitution of man, which he little remembers is an entailed estate. He works under high pressure, until he shows in his face the strong lines from the burdens he bears. Of this labor the wives often reap the benefit; from these small apartments come the means to procure for the wife the palatial home. With man, often it is Samson grinding in the dark through the treason of his money loving spouse. Added to neglect of sanitary law, we have in our commercial hive another powerful factor. It is not hard work that kills the active, but worry-friction on the wheel of life wears out vitality; anxiety is the canker-worm which eats out man's existence.

Female mortality, favorable as it has been on the lists of a few years ago, is much more favorable to-day. Advances in obstetrics and gynecology have been greater during the last quarter of a century than during the preceding ten centuries. New horizons have opened to us in medicine, and the views of modern science are from a standpoint which has risen as it has altered.

During my professional life, divided as it has been between years of service in the regular army and eight years in charge of the St. Louis Female Hospital, I have been thoroughly impressed with the advantage that the female sex holds over the male in reference to proclivity to diseases which are not fatal, and the consequent favorable mortality list. I know it is nothing new to the profession, the facts which I have presented, but I hope to elicit further study, and I do not believe that any longer should a female figure be used as a personification of death, watchful to cut the thread of life. As far back as 1746, M. Deparcieux published at Paris his *Essai sur les Probabilities de la vie Humaine*, in which he gave six valuable tables. In one of these he computed from the registers of different religious houses, and it was shown that female life was superior to male. Since then the bulk of statistics show that longevity is more frequently attained by women than men, and that the number of deaths of males from all causes exceed those of females. The statistics of the kingdom of Bavaria present a larger mortality amongst males than females, and according to Oesterlein the same status prevailed in Geneva. According to Farr's tables of England, the Netherlands, Sweden, and France, the mean age at death is 48.56 years for males, and 49.45 years for females. At Northampton, though more males are born than females, yet the number of living females is greater than the number of males in the proportion of 39:30. At Berlin the proportion of deaths is 19 males to 17 females. At Edinburgh the number of females to the males is as 4:3, but the females that die annually are to the males no higher in proportion than 3.33:3. The proportion of deaths of males over females, out of an equal number of both sexes, is in Philadelphia 107.3:100. The last report of the Registrar-General of England shows that there were 768,778 more females than males in the population of the United Kingdom, while there were 17,737 more deaths of males than of females during the preceding year. The Eng-

lish mortality rates for twenty-five years prove that there is not only less mortality among females, but they also prove that there is far less disease, especially those diseases which are not nervous in their character; not only that, but when every year is especially healthful, the fact tells most in favor of female life. In Spain, during twenty-five years, for every 100 females dying 103 males have died, and this excludes those under the age of puberty. Finkelnburg has shown that the male population in cities is less healthy than the female; that they are more liable to phthisis and to tubercular diseases of the brain and kidneys. It is the nervous, neuralgic diseases which have made us look upon females as so delicate. They are such diseases, non fatal in type, which make us look on women as like a German clock, still a repairing, ever out of frame. Man receives at his birth the seeds of a long life, but from his habits, his exposure, the worry, the anxiety of business, etc., he finishes his life at an earlier period, or rather we should say he has not completed it. Man is the cause of most of his own ills, both mentally and physically. Dante has said that he found the original of his hell in the world which we inhabit. In life insurance the necessity of good health does not mean perfect health, which no one has, but reasonably good health, such as persons have who are not called diseased. Therefore females are far more eligible for life insurance than males. Even the child-bearing period does not bring to them a mortality preponderant over that of males of similar age. Indeed, if anything, the exposures and vicissitudes to which males are ordinarily subjected during the active years of adult life, more than balance in fatal results the incidents of female life during this period. With all the advantages that women have in reference to freedom from fatal ills she is yet in bonds. Though she fills up her appointed circle of action with greater regularity than men, yet she is bound down by the trammels of custom. Though for her run the looms of Cashmere, for her are made the silks of China,

the gauzes of Hindostan, the mousselines of Lyons, the laces of Belgium, and the carpets of Ispahan, yet she is fettered by authority and tradition. Let us free her from these bonds, remove the manacles of custom, and break the fetters placed by tradition. Let us commence with the study of statistics, which are furnished by the facts of nature, bearing in mind, as Harvey, in his second letter to Riolan, wrote, that facts cognizable by the senses wait upon no opinion, the works of nature bow to no authority. There is nothing either more ancient or of higher authority than nature. We should study from her all we can, because, says Bacon, beyond a certain point she becomes deaf to our questions, and no longer gives an answer.

Remember that to woman longevity and great vitality have been given. She has enough of mortality to be a companion for a mortal called man, so that man can say "she's mortal, but by the immortal God she's mine."

LOUISVILLE MEDICAL NEWS. — Dr. L. S. McMurtry retired from the editorial chair of this journal about the middle of the year, and his place is filled by Dr. H. A. Cottell, who was formerly one of the editorial staff.

THE TRI-STATE MEDICAL SOCIETY will meet in English's Hall, at Indianapolis, on the 18th, 19th and 20th of September, 1883, commencing at 9 A. M.

Excursion rates have been secured on the following railroads: C. C. C. & I.; Cin., Ind'pls, St. Louis & Chicago; Cin., Wabash & Mich.; Ind'pls & St. Louis; I., B. & W.; Wabash, St. Louis & Pacific; Ind'pls & Vincennes; J. M. & I.; Pitts., Cin. & St. Louis; Vandalia, Evansville & Terre Haute; Fort Wayne, Cin. & Louisville.

The New-Denison, Grand, Bates and Brunswick have reduced their rates for the occasion, and everything promises a very large attendance. Many papers of great interest will be presented. For further particulars address Thos. B. Harvey, M. D., Indianapolis, chairman of Committee of Arrangements.

CASES FROM PRACTICE.

THREE CASES OF POISONING BY TAKING CHLOROFORM INTERNALLY.

BY J. FRIEDMAN, M. D., ST. LOUIS.

About two years ago I was called in a hurry to attend a woman having convulsions. On entering the room in which my patient lay, I immediately perceived the smell of chloroform. Thinking that some one had used it, giving it to the patient by inhalation, I inquired, and found that the patient had taken about a tablespoonful in order to relieve a colic. Convulsions were so severe that her legs were doubled up on her body, jaws fixed and suffering intense. When free from a spasm she would complain of burning pain in her stomach. Not having seen a case before, or even read of a case, I did not know what to do for her. Concluded morphine would do no harm, at least would relieve the pain in the stomach, and gave her a quarter of a grain hypodermically. She had no more convulsions after the injection. Next day I found her worn out and with throat and mouth burned. This was relieved by simple mucilage. On returning to my office I found that Stillé, in his Materia Medica, mentions a case, and says that opium was an antidote.

My second case occurred some six months ago. A young lady, disappointed in love affairs, took a half ounce of some toothache drops which she had obtained in a neighboring drug store. Here again the odor of chloroform was apparent. On sending to the druggist from whom she obtained the drops, I learned that the bottle contained equal parts of chloroform and laudanum. She had no convulsions, simply the intense burning in throat and stomach. No symptoms of opium poisoning developed. I did nothing but treat the local effects of the chloroform.

My third case occurred three weeks ago. An old woman came to get rid of a tape-worm. I prescribed a dram of chloroform to be taken in an ounce of mucilage of acacia, to be followed by an ounce of sulphate of magnesia. This prescription I had used repeatedly, and never had had any poisonous effects follow it. In this case, however, the taking of the chloroform was followed in five minutes by convulsions. The patient was taken while walking in her room, and fell to the floor in convulsions. Of course I was immediately summoned, and, thanks to my former experience, immediately relieved her by the injection of morphine.

While it is not often that people take chloroform internally, the above cases prove that it may occur. I have heard it stated that it would be impossible for a person to take pure chloroform on account of its burning. One of my cases took it pure, and a tablespoonful at that. The above cases also prove that morphine is a ready antidote. The second case the patient having taken laudanum with the chloroform, had no untoward symptoms.

PORRO'S OPERATION.

PERFORMED BY PROF. CARL BRAUN, VIENNA.—REPORTED BY DR. W. ENDRES, ST. LOUIS.

The following is a description of the third of three operations that Prof. Braun performed the past week, all being alike, only in the result; this also being his twelfth anniversary of performing this operation. The disease that caused the necessity for the operation was alike in all three; the women were between 32 and 40 years:

CASE XII.—May 1, 1883. The patient, 40 years old, in her third pregnancy. In the first, nine years ago, she was delivered safely with forceps. The second ended in an abortion at four months, brought on by typhus fever.

The disease, osteo-malacia, has progressed to such an extent that the femurs cannot be separated from one another, and the inlet of the pelvis is so small that it is impossible to introduce

the hand. The circumference of the body at navel was 87 centimeters(34½ inches) at the inlet of the pelvis, 67 centimeters (26.37 inches).[1]

Dimensions of the preceding case performed on April 26, 1883:

		NORMAL.	DIFFERENCE.
Circumference of the pelvis, -	80 c. m.	90 c.m.	10 c.m.
Anterior spine of the ilium, - -	21 "	24 "	3 "
Crest of the ilium, - - -	25 "	28 "	3 "
Trochanters, - - - - -	28 "	32 "	4 "
Congugat. externa, - - - -	17 "	20 "	3 "
" diagon, - - -	8 "	13 "	5 "
" vera, - - - - -	6 "	11 "	5 "

Allowing 1 c. m. for fat.

Twenty-four hours before the operation the patient was given a mild cathartic, and was kept as much from thinking over the operation as was possible.

After being chloroformed she was placed on the table and a soft rubber sheet, previously dipped in carbolized water, laid over her, covering the body from the breasts to the knees. A piece was cut out accurately to allow the abdomen to come through, a warm, wet carbonized cloth wrapped around the edges. The abdomen was then shaved, scoured with lemon and washed clean.

The external cut extended in the median line twelve inches from the navel downwards, and was made with a blunt-pointed knife. The peritoneum being taken up with a grooved director, was cut, and the uterus slipped out as a nut, care being taken not to allow the bowels to come out or blood to get into the abdominal cavity.

An écraseur was applied around the base of the uterus in position, but not tightened; also a rubber tubing encircled the pedicle, each held by an assistant. A cut was then made in the walls of the uterus, not entirely through, the operator tearing it open with his fingers; the child was drawn out and held suspended over the mother to allow of the blood flowing back into the placenta, two clamps placed on the cord, the cord cut and the child given over to an assistant.

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[1]One inch equals about five and one-half centimeters.

At the moment the cut was made into the uterus the écraseur and tubing were fastened to prevent hemorrhage from the uterus, but still not tight enough to cut off the circulation between mother and child. This part of the operation went wrong in case 11th, for the child drowned in its own fluids before it was delivered, but in this case it was delivered all right. The rubber tubing was put on in case the écraseur should slip, which happened in this case.

The écraseur and tubing were now tightened down hard and the uterus clipped off with a pair of scissors, leaving about one and a half inches above the écraseur and a number of volcellums attached to control it by. Large flat sponges were placed in the abdominal cavity to confine the bowels in their proper places, and to absorb the blood, their number being counted, so as not to leave any in there by mistake. The operator now commenced to stitch up the walls of the abdomen, the stitches being one half inch apart and one half inch from the borders, down to the pedicle of the uterus, which was at the lower angle. He used silver wire, and none were tightened until all were in position, when he drew the sponges out and commenced tightening from above, fastening with metal buttons. He now stitched the borders together with a continued silk thread, taking great care to keep the borders well in apposition, and introduced a hair-lip pin next to the pedicle of the uterus for safety. A Billroth's large clamp was placed above the écraseur and its stump burned off with a thermo-cautery. The patient was now washed, iodoform powder dusted over the entire wound, iodoform lint dipped in carbolic acid water five per cent., thin carbolic gauze dipped in carbolized water, cotton batting applied, and the bandage of oil silk and gauze, square shape with strings on each corner and two to pass around the thighs. The écraseur and tubing were left in position for twenty-four hours, and for safety two more hair-lip pins were introduced.

Result of the three cases:

First case. Mother and child have both left the hospital well.

Second case. Mother walking around, the child having been drowned in the operation. They tried to resuscitate the child

by introducing a silver tube through the larynx, but its lungs were filled with water.

Third case. Mother and child well, but the mother still under observation.

Time of the operation: From the time the patient was put on the table till she was put to bed, one hour and fifteen minutes. The child was delivered five minutes after the operation was commenced. One hour for the stitching and burning the pedicle and ten minutes for the dressing.

A CASE OF CHRONIC BRIGHT'S DISEASE.

BY TINSLEY BROWN, M. D., HAMILTON, MO.

[*Read before the Grand River Medical Society of Missouri, June 6, 1883.*]

O. S., aged 60 years, consulted me May 27th, 1882, complaining of difficulty of breathing, not having been able to lie down to sleep for two weeks, but sleeping in his chair, and otherwise had been complaining for some time. He had been a healthy man most all his life, with the exception of a severe attack of hematemesis, which occurred about six years previously. He had been a steady drinker during his adult life, and followed the occupation of loading stock on the cars and teaming, and therefore was much exposed to bad weather. There was very little puffiness about the eyes and none about the ankles. Having been acquainted with the patient for several years, I noticed that he seemed reduced in general appearance. His strength was somewhat diminished, and work or walking caused a want of breath. Auscultation revealed an irregular action of the heart, intermitting about every third beat. The area of cardiac dullness was increased, while the apex beat was near the mammary line. There was no trouble with the lungs save a mild bronchitis. No complaint made of the kidneys, further than he had to get up often at night to void his urine, and thought he did not pass more than the normal amount during the twenty-four hours. Appetite good. The diagnosis was deferred until further developments.

I gave him digitalis combined with an anodyne, also muriate of ammonia for the bronchitis. The treatment had some good effect, but little more than to allow him to sleep in the recumbent position. The patient consulted me at intervals of several weeks, and at the end of two months, suspecting kidney trouble, I procured some of his urine. The color was normal, no perceptible sediment. Chemical tests showed about one-twelfth of its bulk to be albumen, and later examination gave the same result. The microscope detected both hyaline and granular casts. I made frequent examinations of the urine, always finding albumen and casts. With these facts I made the diagnosis of chronic Bright's disease, of the variety known as granular contracted kidney, the facts most prominent to lead me to this conclusion being his age, history of intemperance and the existence of left ventricular hypertrophy, linked with the constant presence of albumen and casts in the urine. In October (five months after he first consulted me) he grew much worse, his ankles beginning to swell, dyspnea increasing, very severe at times, increased bronchitis and pain in the side, which was probably pleuritic. About the first of this year (seven months after) the lower extremities became very edematous, so that the skin burst on his ankles and discharged a large amount of water. Digitalis, hydragogue cathartics, tonics and milk diet had some good effect. There were remissions in some of the unfavorable symptoms of the patient. At one time most of the edema left the lower limbs. There was no improvement in the cardiac symptoms. He became more and more anemic and wasted, the appetite grew poor, the restlessness of the patient at times required anodynes. The condition gradually grew worse, and he died on the evening of June 2d, apparently from apnea. Entire suppression of urine existed for twenty-four hours before death.

Sixteen hours after death Drs. E. Van Note, W. T. Lindley and myself made a post mortem. Rigor mortis well marked. Edema of face and lower extremities and some general effusion of serum. Abdomen contained a small amount of fluid: intestines reddened. Although the liver weighed four pounds, it was cirrhotic to a considerable degree; it was contracted in its area, but not in thickness. Section further demonstrated this condition. Spleen about normal in size, but appeared to

partake somewhat of the condition of the liver. On removing the kidneys the surrounding tissue was intimately adherent to to the capsule. The surface of each kidney was rough and studded with uneven rounded elevations, the size of a pin's head to that of a small pea. The capsule was opaque and thickened, and adherent to the subjacent structure. Section showed the obliteration of the delineations between the cortical and medullary structures, both being of the same color, which was a deep red. In size they were much below the normal. They contained many cysts, from the size of a pea to that of a hazelnut, and altogether the organ presented a lobulated appearance; it was tough and resisting; the bladder was empty. On opening the chest the sixth and seventh costal cartilages of the right side were completely ossified, which was undoubtedly caused by a stab received about eight years since, and which had penetrated the pleural cavity. Both lungs were entirely collapsed, and pleural cavities filled with fluid, in which was some coagulated lymph. No adhesions were found. Pericardial cavity contained slightly more than the normal amount of fluid, and showed some patches of pericarditis. The heart was at least one-third above the normal size, and walls of the left ventricle were at least one inch thick, and the cavity was full of very dark clotted blood. There were no signs of endocarditis. The conclusions in the case are these: Diagnosis, chronic Bright's disease of the granular variety; cause, intemperance and exposure to cold; immediate cause of death, collapse of lungs from effusion in the pleural cavities, and paralysis of heart.

This case also shows us the necessity of examining the urine where there is difficulty in breathing which cannot be readily accounted for, or where left ventricular hypertrophy is suspected.

DR. JAMES H. JEROME, one of the oldest practitioners of medicine in the state of Michigan, died in Saginaw City, Wednesday, Aug. 8th, at the age of seventy years. He had been a prominent character in the State Medical Association since the time of its organization, and twice filled the president's chair, the last time by a unanimous election.

EDITORIAL.

PRIMARY STRICTURE OF THE ESOPHAGUS AND ITS TREATMENT.

The best method of treating stricture of the esophagus is a subject that interests every one, although, fortunately, not a large proportion of general practitioners are called upon to treat such cases. An article in the *L'Union Médicale* of June 28 relates two cases, one of which occurred in the practice of M. Debove, the author of the paper, and the other in that of Quincke. Both these cases were caused by ulcerations of the esophagus, the result of cicatrization being a stricture. All the cases heretofore reported have been the result of cicatricial contraction after the swallowing of caustic fluids, as solutions of potash, etc., or have been regarded as dependent upon cancerous infiltration of the esophageal walls. Quincke's case was supposed to belong to this latter class until the autopsy was made, when the stomach and esophagus were found to be entirely free from any cancerous alteration; but there were cicatrices, as if resulting from simple ulceration, both in the stomach and esophagus. In commenting upon this case, he remarks that if the true nature of the stricture had been appreciated before the death of the patient, the stricture might have been dilated and the patient's life saved.

M. Debove's case was one of ten years' standing when it came into his hands. The patient had been addicted to the excessive use of alcoholic liquors, but had no history of syphilis. In December, 1870, he felt severe pains toward the tip and at the upper part of the sternum; he had difficulty in drinking and eating, which were extremely painful and accom-

panied by regurgitation of that which he swallowed. In short, the symptoms during the ten years indicated that there were two distinct periods; the first, lasting during eight years, was characterized by vomiting of blood and dysphagia, due especially to the pain; the second, characterized by dysphagia, due especially to a stricture which obliged him to depend upon liquid nourishment. The duration of the trouble precluded the idea that this trouble was dependent upon cancerous disease.

M. Debove devised an apparatus for the purpose of safe dilatation of the stricture, which was used with complete success in this case, and which seems worthy to be generally known to the profession, and which promises to be of value in all cases of cicatricial stricture of the esophagus. This apparatus consists of a long, flexible stem of whalebone, terminated with a little metallic ball; of a series of little olives, of hard rubber, perforated, and bearing numbers indicating their diameter in millimeters (the series including diameters from eleven millimeters to twenty millimeters); of a hollow metallic sheath, formed by a ribbon rolled into the form of a spiral. This is very flexible, can bend in every direction, has a certain rigidity when slipped over the whalebone, which serves as a guide and then follows it in all its flexions. This hollow shield, which he calls the propulsor, serves to push the olives upon the whalebone sound.

The sound is introduced, and ordinarily passes readily by reason of the small size of the ball at the end. One of the olives is then "threaded" upon the guide and pushed onward with the propulsor, in which maneuver considerable force may be used, and without fear of producing a false passage, because of the conductor. So there are introduced at the same sitting a series of olives of increasing size; they are then withdrawn with the sound, having been retained below the stricture by the ball at the end. By reason of their shape they act upon

the stricture with the same effect in the withdrawal as in the introduction.

In M. Debove's case dilatation was commenced Nov. 12, and was continued, gradually increasing the size of the olives, until Nov. 25, when the largest olive, measuring twenty millimeters, was passed. Nos. 19 and 20 were then passed daily until Dec. 5, when the patient was taught to use a rubber bougie, and directed to pass this every day. Three months afterwards there had been no tendency to a renewal of the stricture, and there seemed to be every reason to believe that the use of the rubber instrument two or three times a week would enable the patient to live comfortably, and to eat such food as people usually eat.

The simplicity and safety of this instrument commend it to the notice of all surgeons who may have occasion to treat such a case. Of course it is not proposed to treat cases dependent upon cancerous disease by means of forcible dilatation.

PRAGUE.—In this city is located one of the finest lying-in hospitals in the world, in which more than three thousand cases are treated yearly. The cases as admitted are divided between two clinics, to which medical students are admitted, and one for midwives. The payment of ten florins (four dollars) secures a bed in the students' room, where one can live very comfortably—being called in every case by an electric bell connected with the delivery ward. Opportunity is afforded to make examinations as minutely and as frequently as desired, and to take charge of the delivery of as many cases as one may choose; also to apply forceps and do the other *ordinary* obstetric operations. In view of the large number of foreigners during the latter part of the summer, it has been determined to have one or more courses on operative and clinical obstetrics in the *English language.*

BOOK REVIEWS AND NOTICES.

STUDENT'S GUIDE TO DISEASES OF THE EYE. By EDWARD NETTLESHIP, F. R. C. S., Ophthalmic Surgeon to St. Thomas Hospital and to the Hospital for Sick Children, Great Ormond Street (London). Second edition. *Philadelphia: Henry C. Lea's Son & Co.* 12mo., pp. 404.

The first edition of this book was reviewed in the COURIER for June, 1880, to which review there is not much to be added. The author has revised and rearranged the earlier production, introducing a number of new illustrations, and omitting a few of the original ones. A page has been added describing, though not explaining, keratoscopy; also a chapter on optical outlines, which treats of ordinary laws of refraction.

In the American edition, a chapter by Dr. Wm. Thompson on the tests used by the Pennsylvania R. R. for detecting color blindness and defects in the acuteness of hearing in its employés, has been inserted.

Though we differ from the author in some things, e. g., that in treating obstructions of the nasal duct the lower punctum should be slit, still the book is very good, being both condensed and accurate; and we take pleasure in commending it to medical practitioners and to medical students.

M. H. P.

MEDICAL SOCIETY OF THE STATE OF TENNESSEE TRANSACTIONS, 1883. Fiftieth Annual Meeting.

The Medical Society of Tennessee, according to the report of the secretary, has a membership considerably exceeding three hundred, but we notice that the same report indicates the presence of three thousand practitioners in the state. Why is it that so small a proportion of the physicians in any state are identified with the state society?

In the treasurer's report we notice an item of $9.00 for printing. How do they publish an edition of five hundred copies of the "Transactions," containing over one hundred pages each, for that amount? No statement is given of any other amount paid for printing or publishing the Transactions.

The president's address is a brief but clear affirmative response to the question, "Is man immortal?" Then follow "Historical Reminiscences," by Thos. Lipscomb, M. D.; "Perils of Femoral Hernia," by A. B. Tadlock, M. D.; "Clinical Remarks on Plastic Surgery," by J. G. Sinclair. "An Ovarian Tumor of Twenty-two Years' Duration," by W. D. Haggard, M. D.; "Vaccination and Small-pox," by J. S. Nowlin; "A Case of Induced Delivery," by J. W. Davis, M. D.; Obituaries, Constitution and By-Laws, Code of Ethics, Roster of Members.

MEDICAL AND SURGICAL ASPECTS OF IN-KNEE (GENU VALGUM); its relation to rickets; its prevention and treatment, with and without surgical operation. By W. J. LITTLE, M. D., F. R. C. P., etc., assisted by E. MUIRHEAD LITTLE, M. R. C. S. Illustrated by upwards of fifty figures and diagrams. *D. Appleton & Co.: New York.* 1882.

This little volume is from the pen of one who was the first to write a systematic account of this affection, which he did some forty years ago in the *Lancet.* He is an easy and pleasant writer, and draws both upon his own vast experience and upon the writings of others, among whom we notice the names of two or three of our American surgeons.

The author describes nine different varieties of knock-knee according to its etiology. In the larger propostion of cases, according to his view, genu-valgum is due to a loss of tone in the structures surrounding the joint, a relaxation of the muscles or ligaments from various causes producing debility. He does not think that this condition is generally of rachitic origin, wherein he takes direct issue with Macewen.

Dr. Little believes that this deformity is readily amenable to treatment, and asserts that, so far as the knee-inversion is concerned, he has never seen but two cases which baffled judicious treatment.

We heartily commend the study of this little volume to all who treat diseases of children, as to them especially will its suggestions be valuable.

BRAIN REST. By LEONARD CORNING, M. D., etc., etc. *New York: G. P. Putnam's Sons.* 1883. 16mo., square, pp. 103; cloth, $1,00.

In this little volume the author considers, first, the physiology of sleep, and dwells at some length upon the absolute necessity for healthy living of regular, natural sleep. He dis-

cusses the nature and causes of insomnia, and lays down principles for the treatment of this condition. He regards as of very great value a mechanical appliance which he has devised for the purpose of diminishing more or less the circulation through the brain by compressing the carotid arteries. He makes also some very serviceable suggestions with reference to the administration of hypnotics, especially bromides and chloral. It contains many points that are practical and valuable.

A SYSTEM OF HUMAN ANATOMY, including its Medical and Surgical Relations. By HARRISON ALLEN, M. D., etc., etc. *Philadelphia: Henry C. Lea's Son & Co.* 1882. (St. Louis: J. H. Chambers & Co.) Section IV. Arteries, Veins and Lymphatics. 4to., pp. 122.

The discussion and representation of the circulatory system are on the whole quite satisfactory. The veins receive a larger share of attention than is usually accorded to them.

There are a number of interesting digressions with reference to physiological and surgical points in connection with the descriptions of the arteries, and especially we note the reference to the matter of collateral circulation. One or two inaccuracies are found in the description of the external carotid and internal maxillary arteries. No reference is made to anomalies of the circle of Willis, but in other respects the account of the cerebral circulation is excellent.

It is much easier to find errors in another's work than to avoid them in one's own, and taken all in all the work before us is a very good one.

ELECTRICITY IN MEDICINE AND SURGERY. By GEORGE C. PITZER, M. D. St. Louis, Mo. 8vo., pp. 83; cloth, $1.00.

The object of this book, as expressed in the preface, "is to furnish the medical student with a book containing the principal practical facts embraced by the subject of electricity and electro-therapeutics."

The first thirty pages are devoted to descriptions of various forms of electrical batteries. It would have been well to introduce in this part some brief practical directions for the care of batteries, with reference to which many physicians are extremely ignorant. We are fully persuaded that many failures in the use of this valuable agent are due to the fact that the battery was not properly cared for.

The remainder of the volume is occupied with a discussion of electro-therapeutics, and contains a large number of reports of cases in the practice of the author and others, which illustrate the application of the various forms of electricity in a good many different diseases.

While this is by no means a systematic or exhaustive exposition of the subject, it contains many hints and suggestions that will be helpful to the beginner, and may prepare the way for more thorough and comprehensive study.

THE PRINCIPLES AND PRACTICE OF SURGERY. By JOHN ASHURST, Jr., M. D. Third edition, enlarged and thoroughly revised, with five hundred and fifty-five illustrations. *Philadelphia: Henry C. Lea's Son & Co.* 1882. 8vo., pp. 1064; cloth, sheep, or half Russia. (St. Louis: J. H. Chambers & Co.)

This revised edition of Dr. Ashurst's surgery, which has been received so favorably by the profession in former editions, has received careful and conscientious care from the author in its preparation. He has made such additions and modifications as his wider experience as a teacher and practitioner have shown to him were demanded, and in its present form it is fully worthy of the favor of the profession. We know of no single volume on the subject which is more thoroughly comprehensive and satisfactory than this one.

THE SYSTEMATIC TREATMENT OF NERVOUS PROSTRATION AND HYSTERIA. By W. S. PLAYFAIR, M. D., F. R. C. P., etc. *Philadelphia: Henry C. Lea's Son & Co.* 1883. Small 8vo., pp. 111; cloth.

This is simply a report by Dr. Playfair of some of the results which he has achieved in carrying out in London the plan of treatment first systematized and carried out by Dr. Weir Mitchell, of Philadelphia. He is an enthusiastic advocate of this treatment, and has done much to demonstrate its value to the profession of Great Britain.

SENSATION AND PAIN. By CHAS. FAYETTE TAYLOR, M. D. A lecture delivered before the New York Academy of Sciences, March 21, 1881, being one of the public course for 1880–81. *New York: G. P. Putnam's Sons.* 1881. 16mo. pp. 77; cloth, 75 cents.

This is a very interesting discussion of a subject which deserves closer study and more careful attention than it has often received. It will be not only pleasant but profitable for anyone to read this little volume.

MEDICAL ELECTRICITY; a Practical Treatise on the Application of Electricity to Medicine and Surgery. By ROBERTS BARTHOLOW, A. M., M. D., etc. Second edition, enlarged and improved, with one hundred and nine illustrations. *Philadelphia: Henry C. Lea's Son & Co.* 1882. 8vo., pp. 291; cloth.

Whatever Dr. Bartholow has written has been well considered and carefully prepared. He has had an extended experience in the use of electricity, and the record of his observations, as given in this treatise from his pen, will be helpful to all who are seeking a practical knowledge of the best modes of applying this potent agent and of learning the scope of its useful adaptation to the needs of the suffering.

A CLINICAL HAND-BOOK ON THE DISEASES OF WOMEN. By W. SYMINGTON BROWN, M. D., etc. *New York: Wm. Wood & Co.* 1882. 8vo., pp. 247; cloth.

Though this book does not claim to be a complete treatise on gynecology, the author has undertaken rather too much in attempting to cover in one small volume "most of the diseases peculiar to women," puerperal diseases, gonorrhea and syphilis. Most students and country practitioners will prefer to have a more thorough discussion of these subjects than can be compassed in such a work as this.

Several little inaccuracies of expression should be corrected, such as acetate opii, acetate opii deodorata, the mixture of Latin and English terminations in mentioning remedies, nominative for genitive ending in prescriptions, etc.

Still there is a good deal of information well condensed, and the views as to treatment are in the main very excellent.

A TREATISE ON THERAPEUTICS, comprising Materia Medica and Toxicology, with especial reference to the application of the physiological action of drugs to clinical medicine. By H. C. WOOD, M. D., etc. Fifth edition, revised and enlarged. *Philadelphia: J. B. Lippincott & Co.* 1883. 8vo., pp. 140; cloth, $1.00. (St. Louis: H. R. Hildreth Printing Co., J. H. Chambers & Co.)

Dr. Wood's Therapeutics has become a standard work, and claims a place in the library of every physician who seeks to keep himself acquainted with the advanced workers of the day.

Dr. Wood's studies of remedies with respect to their physiological action upon the lower animals and upon healthy hu-

man beings have done much to stimulate such studies in others, and to place rational therapeutics upon a much firmer and stronger foundation than it held before.

The fact that this fifth edition was demanded, by the exhaustion of the fourth within six months, is demonstration sufficient of the popularity of the work.

THE INTERNATIONAL ENCYCLOPEDIA OF SURGERY. A Systematic Treatise on the Theory and Practice of Surgery, by Authors of various Nations. Edited by JOHN ASHHURST, JR., M. D., Professor of Clinical Surgery in the University of Pennsylvania, *New York: Wm. Wood & Co. 1883.* 8vo; pp. 760; sheep.

We find considered in this volume Injuries and Diseases of the Muscles, Tendons and Fasciæ, by P. S. Conner, M. D.; the Injuries and Surgical Diseases of the Lymphatics, by Edward Bellamy, F. R. C. S., London; the Injuries of Blood-vessels, by John R. Lidell, A. M., M. D.; Surgical Diseases of the Vascular System, by John A. Wyeth, M. D.; Aneurism, by Richard Barwell, F. R. C. S., London; Injuries and Diseases of Nerves, by M. Nicaise, M. D., Paris; Injuries of Joints, by Edmund Andrews, M. D., LL.D.

The subjects here reviewed are of vast importance, and are well worthy of the space assigned to them and the talent that has been brought to bear in their elucidation. The editor has, we think, reason to feel satisfied with the work of the authors in this volume. Although the articles are not by any means of equal merit, the selection of the writers was judicious, and the result is alike complimentary to the discriminatory judgment of the editor and the experience, learning and industry of the collaborators.

One of the marked disadvantages of this method of writing an Encyclopedia of Surgery is found in the necessary repetition by different authors of many facts necessary to a proper presentation of the subject assigned to them. This is unavoidable where the subjects are closely related, and where the basis of their proper study is found in identical anatomical structures and common physiological properties; but the many marked advantages derived from the multiple sources of the wisdom herein contained cannot but be evident to those who study the work.

The editor has a wide field from which to select co-workers,

and his acquaintance with the profession, aided by his profound knowledge of surgery, has enabled him very generally to make worthy selections—to elect men for special subjects who had at least more than a moderate clinical experience in the treatment of the conditions considered, where this clinical experience is essential to wise counsel. Some of the articles in this volume bear the impress of the student of the literature of the subject rather than the profound knowledge of the conditions (clinical conditions) that come of long and accurate clinical study; but most of the authors who appear in this book, as in those that have preceded, evidently not only have command of physiological and pathological facts, but, where important, have the wide clinical experience that gives the wisdom we seek in our standard works, and which we should not expect of any one person, no matter how wise or learned he may be. Many of our Systems of Surgery and Medicine have been reprints of older volumes, with certain personal characteristics engraved upon a portion of the subjects considered. This, with aid of facts and cuts accepted by authority of long recognition by the profession, or resting on the undisputed dicta of a former author, have generally constituted the new systems of our various authors.

In our present International Encyclopedia we still find some familiar cuts and many old facts (for fortunately we have some established precepts in surgery), but we find little time wasted in historical data, but each author endeavors to impress upon his article the best wisdom of the age, and gives to it the bias of his personal clinical experience. Fortunately to us who look to this surgery as authority, this experience is ample to moderate the enthusiasm of youth, and of the character that has made its possessor a successful practitioner of surgery, and often of special note in the department to which he was assigned.

This ought to be a better work than any one man could write. It should be, and we think will be, a marked improvement on Holmes' System of Surgery, for the editor has availed himself quite freely of the native talent of American surgeons, who number some of the noblest men and ablest surgeons who have adorned our learned profession.

This volume is worthy of its fellows, but not above criticism.

It seems hardly necessary to commend each separate article, or to criticise the singular—unwise to do the one, unnecessary to do the other—for the reader must sift and select in accordance with his judgment.

AIDS TO MEDICINE—Students' Aids Series. Part I. (double part). The General Diseases, Diseases of the Lungs, Heart, Blood-vessels and Liver By C. E. ARMAND-SEMPLE, B. A., M. B., etc. *New York: G. P. Putnam's Sons.* 1883. 16mo., pp. 120; paper, 35 cents.

This is one of the volumes of the "Students' Aids Series," intended merely as a skeleton to assist a student in systematizing and remembering what he has learned from lectures or text-books. They are virtually brief notes, such as one might jot down in listening to lectures or reading treatises.

THE EFFECT OF SENSORY IMPRESSIONS on the reflex actions, as well as on the consciousness, depends on a great variety of interacting causes; so that we are obliged to begin a successful study of the phenomena of conscious life by distrusting and discounting the evidence of our senses in advance. I mean, of course, conclusions drawn from mere sensations. Alone, they are not evidence of anything, and without support they are not to be trusted as sufficient evidence of positive facts.—*C. Fayette Taylor in "Sensation and Pain."*

In fact, a large portion of our lives is spent in being deceived by our senses, in finding the mistakes and in efforts toward correcting them.—*C. Fayette Taylor in "Sensation and Pain."*

ESTHETIC EDUCATION, especially when not accompanied with special discipline, tends to increase inherited habits until the existence of some persons consists of successions of nerve-center explosions—with all the prodigal waste of energy which accompanies that state—where mere pulses would answer much better. Such a person is thrown into ecstasies of pleasure or pain by causes by which a balanced temperament would not be affected.—*C. Fayette Taylor in "Sensation and Pain."*

TRANSLATIONS.

CATARRHAL ULCERATIONS.

Address before the Berlin Medical Society, by R. VIRCHOW.—Translated by DR. H. W. HERMANN, ST. LOUIS.

Although I always try to seek for the origin of things, I am unable to say who has invented the catarrhal ulcer. The deceased Niemeyer has always appeared to me its principal supporter. Whenever I demanded of a student: where did you see that? he would say: that is in Niemeyer. I hope that our professional brother, Lewin, will not recur to Niemeyer too. At any rate, I will be glad if we can come to an agreement on a subject which is of great importance, because it is to be determined whether an affection, which, under all circumstances, is already sufficiently severe, might not be saved from the ill reputation that it can produce ulcers.

I would first raise the question. What is catarrh? If we do not agree on this point all further conclusions will be viewed from different points of view, and we will never come to an agreement. I have always maintained, and still adhere to the old view, according to which the word catarrh comes from *katarreo*, consequently, must secrete something that is movable, perhaps not sufficiently so that it produces a stream, yet so that it can move from the place of secretion; to which comes the second condition that the catarrhal secretion is produced by an intact mucous membrane. It has always appeared to me a necessary condition of catarrh that there be a mucous surface present, not destroyed in any way or replaced, for instance, by an ulcer.

There must be a natural surface, and from this surface the secretion must come.

The term catarrh was first applied to the nasal passages; and for a long time only affections of the nose with secretion were

called catarrh. Gradually the term has been extended to other mucous membranes. But one must admit that the example of catarrh of the nose is most convenient. Every one, from time to time, passes through a repeated course of catarrh of the nose, and every one may ask himself: What have you now? Have you something which may give rise to ulceration? Does this secretion come from the deeper layers of tissue? or from the surface itself? I will here leave undiscussed the question, how far the neighboring glandular organs, especially the larger glands, which lie outside of the mucous membrane, contribute to these secretions. In some cases these glands, as the salivary glands, the pancreas, the liver, contribute a considerable part of the secretion; but we must, whenever we can, exclude the additional secretions entirely. While I hold this strict definition of catarrh, I, of course, lay the principal stress on the secretion. I can not diagnosticate a catarrh except by its secretion. If the mucous membrane simply presents the appearance of one in which catarrhal secretion occurs without that secretion being present, I am not, in my opinion, justified in calling it catarrh.

The affection which has been called by the well-sounding name of dry catarrh, is a product of very different conditions. Besides the meaning of dry catarrh has been very different at different times. Some have so termed a condition where the secretion has lost its mobility, has lost its fluid consistence, and has been transformed into a hard, compact, stationary mass. Now, I will gladly admit, that if one speaks of bronchitis sicca in this sense, and assumes that a tenacious, viscid mass is secreted which may lead to durable, and even permanent plugging up of the bronchioli, he may be justified in a certain degree. But when one says there is a dry catarrh in which nothing is secreted, then my understanding is at an end. Then I really do not know why I should call that a catarrh. Those who have not recognized this limit have been led step by step further on until the meaning of the term catarrh has been extended so far that for some organs no condition has been left to be called by another name. When we hear some of our colleagues, we should think that, except cancer and perforating ulcer, the stomach suffers only from catarrh.

Indeed, gentlemen, I must here protest, not only as a patho-

logical anatomist, but also as a logical physician. Even in the stomach one should not call any affection catarrh in which there is not at least more or less secretion. At autopsies we sometimes find the stomach coated with a finger-thick layer of tenacious mucus. So it is evident that it can furnish catarrhal secretions, and we have all reasons, under certain circumstances, to speak of catarrhal secretions, but we have no reason to extend this term to all possible conditions of irritation of the mucous membrane where no secretion occurs.

Returning to the question under consideration. Does a catarrh produce ulceration? The question, in my mind can only be put in such a way that one considers the ulceration as a regular, so to speak. normal terminus of catarrh. We have sufficient proof that in any diseased condition various complications may arise with results which the disease in itself could not have produced. If, for instance, a child of delicate organization suffers from severe nasal catarrh, nothing is more common than the occurrence on the skin under the nostrils, on the upper lip, of erosions of the epidermis which expose the cutis vera, which, under ordinary circumstances, should not be exposed to the air. The surface dries, a crust forms, pus begins to burrow beneath it, and finally an ulcer may appear in this place. Now, if some one wishes to comprise all this in a few words, he may say the child suffers from a catarrhal ulcer. But in this case the ulcer is situated where there never was a catarrh, while in the place where the catarrh really is there is no ulcer.

In the same way it is when, for instance, a child suffers from a chronic catarrh of the external ear. There, too, the secretion flows down, if not removed in time, and causes erosive conditions under the ear and finally even on the neck, sometimes implicating the skin extensively. When nothing is done that should be done, and everything is done that should not be done, then ultimately *ulcera cutanea* will be produced, and perhaps still persist when the catarrh itself is stopped. But in my opinion we have no reason to favor the inclination of some physicians to call such ulcerations catarrhal. Many of the older physicians have, not without some reason, tenaciously insisted that under such conditions, erosions can appear also on mucous membranes, and the term erosive ulcer has sometimes received

such extension that the most important affections were comprised under it.

I wish to remind those who have employed themselves particularly with the history of phthisis, of the fact that even at the time when we studied, the greatest clinical teachers of France held the view that the laryngeal and tracheal ulcerations of phthisis were caused essentially by erosions, the conditions being that the expectorated sputa irritated the mucous membrane and finally eroded it as the secretion flowing from the nose or ear eroded the skin. Yes, I must confess that I, myself, had a stage when I was so under the influence of the authority of Schoenlein and Louis, that while the young curator of a museum I labeled preparations, "Erosive ulcers of the trachea or larynx." However, I soon satisfied myself that such action as is observed by irritating secretions on formerly intact neighboring parts cannot be followed beyond the region of pavement epithelium. Still, I believe that wherever we have a mucous membrane covered with pavement epithelium we should have in mind the possibility of such a form. Whether, however, the secretion which is the irritating agent is, strictly speaking, a catarrhal one, or whether it comes, as with consumptives, from an ulcerated cavity, seems to me rather indifferent.

The secretion from an ulcer has the same deleterious action as that from a catarrhal mucous membrane. We can easily see that in a neglected varicose ulcer, where sometimes far in the periphery, the parts show an eroded condition.

I wish to remark right here, that such surfaces covered with the pavement epithelium are not found very extensively. Such a tract exists continuous from the lips to a little beyond the cardia. This epithelium extends into the stomach itself by means of small projections. In this whole tract eroded conditions may exist and do undoubtedly exist. In the respiratory tracts we find few places that are covered with pavement epithelium, as is well known. Strictly speaking, we have only the small surface on the posterior wall of the larynx between the arytenoid cartilages and extending from there to the true vocal chords. In these surfaces, also certain forms of ulcers may appear, which, according to my opinion, should be called erosive, in which, essentially, certain parts lose their covering of pavement epithelium, and, in consequence, soft, moist surfaces are ex-

posed. Naturally these parts do not become dry as on the external skin. This is hardly ever seen in a marked way, but by exposure brought on by denudation of the epithelium, these surfaces are in a very bad condition. They are constantly irritated, deepen, and, indeed, may at last develop in these eroded places real ulcers.

Perhaps I may adduce another well known example which gynecology offers. At the junction of the mucous membrane of the cervix uteri with the vagina, hence, immediately at the external os uteri, quite the same eroded conditions have been minutely observed. The catarrhal secretions which flow from the cervix uteri gradually loosen the epithelium of the portio vaginalis; it becomes lost, and an eroded surface remains, which in time presents an uneven, velvety appearance. The papillæ, which normally occur in this region, enlarge; the blood vessels become congested; and the surface becomes moist; and in this way are formed the dark red, so-called granular erosions. This designation is well chosen; there is no ulceration there; the continuity of the surface is not broken; only the layer of epithelium is wanting. The loss of substance does not extend into the mucous membrane itself. Neither is it usual that ulcerations follow from them. I do not say that no ulcerations can form, but I assert that that is a great rarity, and that this condition, which sometimes exists for years, and gives rise to constantly extended irritation, consists mainly in an erosion.

[TO BE CONTINUED.]

IMMUNITY OF COPPER-WORKERS FROM CONTAGIOUS DISEASES.—Dr. Burg presented a communication a few weeks ago to the *Société de Biologie*, of Paris, showing the remarkable immunity from cholera and typhoid fever enjoyed by copper-workers. He claims that in the epidemics of typhoid fever in 1876 and 1883 only two deaths occurred among forty thousand copper-workers. In addition to this remarkable statement, he asserts that the records of an association of three hundred copper-workers show that during the sixty-four years since its organization only three deaths by epidemic disease have occurred among its members.—*La Tribune Médicale*, April 29, 1883.

REPORTS ON PROGRESS.

MEDICINE.

Habitual Constipation.—J. Mortimer Granville advises the following in constipation dependent upon a lax and torpid condition of the muscular coat of the alimentary canal, a loss of the reflex contractility that is natural and necessary to proper action:

℞. Sodæ valerianatis, - - grs. xxxvj.
Tr. nucis vomicæ, - - - ʒj.
Tr. capsici, - - - m. xlviij.
Syr. aurantii - - - - ʒiss.
Aquæ, - - - - - q. s. ad ʒvj.

M. Sig. A tablespoonful three times a day a half hour before meals.

When there is constipation depending on a deficiency of glandular secretions generally throughout the intestine, manifested by a peculiar dry and earthy character of the dejecta when the bowels *do* act, he gives something like this:

℞. Aluminis, - - - - - - ʒiij.
Tr. quassiæ, - - - - - ʒj.
Infus. quassiæ, - - - - ʒvij.

M. Sig. Take two tablespoonfuls three times a day after meals.

When constipation is due to the interruption of the *habit* of a daily evacuation of the bowels, he often prescribes the following with satisfactory results:

℞. Ammoniæ carbonatis, - - ʒj.
Tr. valerianæ, - - - - ʒj.
Aquæ camphoræ, - - - ʒv.

M. Sig. Two tablespoonfuls to be taken in the morning immediately on rising.

It is, as a rule, neither necessary nor desirable to continue it for a longer time than a fortnight.—*Brit. Med. Jour.*, May, 26, '83.

Salicin and Rheumatic Endocarditis.—DR. T. J. MACLAGAN remarks: "Salicin is the preparation to which I give preference, not because I regard it as superior to salicylate of soda as an anti-rheumatic, but because it may be given in large and frequent doses without causing such disturbance of the system as not unfrequently follows the use of salicylate, and necessitates its suspension. My experience, too, is that those treated by salicin (which is a bitter tonic) convalesce more rapidly than those treated by the salicylate. There is an impression abroad that it is very expensive. It is not so. Two of the chief English manufacturers of it have told me that they are prepared to supply it to hospitals and dispensaries at 10s. 6d. a pound. Convalescence is so much more rapid under its use, that I am not sure that it would not in the long run prove cheaper than salicylate of soda. But, whichever is employed, let it be given in large and frequent doses. I make this appeal in the interest of the heart as well as of the joints. Let every case of acute rheumatism be regarded and treated as one in which heart complications may possibly be prevented, and it is probable that in some cases they will be prevented. But every hour is of importance, for it needs no argument to show that the danger to the heart is less in a case in which the disease is arrested within twenty-four hours than it is in one in which three or four days are expended in the process. The fact has never been accepted by the profession that the course of acute rheumatism may in many cases be arrested within twenty-four hours of the time that treatment commences. The recognition of that fact is the keystone to all possible success in the prevention of cardiac complications.—*British Medical Journal.*

Feeble Influence of Iodine over Malarial Fevers.—There have recently appeared numerous reports from medical men in various parts of the world, reciting the virtues of iodine in the treatment of malarial fevers. It is true that these do not all agree as to the exact degree of reliance that may be placed on this agent as an antiperiodic. There are, however, those who claim for it an efficacy not less than that of Peruvian bark, as far as the immediate control of the attack is concerned; and even greater than bark in preventing its recurrence.

It must be confessed, however, that the results reported by various observers do not entirely agree. Here we find an assertion that in chronic malarial poisoning iodine does its work most effectually; there, that its value is nil; in another article we find it is recommended to render permanent the cure that quinine has begun; in still another, that it is given in combination with quinine, arsenic, etc. On the other hand, we find that by some anti-periodic properties are denied to iodine.

Attracted by the testimony in its favor, and with the desire to definitely ascertain the powers of iodine as an antimalarial remedy, in view of the ease of its administration, and of its comparatively small commercial value, Drs. I. E. Atkinson and Hiram Woods availed themselves of the opportunity of treating malarial fevers afforded at Bayview Asylum, Baltimore, during the late summer and autumn of the past year (1882).

Their experience leads them to draw the following deductions as to the use of iodine in *acute malarial poisoning:*

1. In intermittent fevers it has some feeble influence in controlling the paroxysms.

2. It takes usually from three to eight days to exercise this influence.

3. In *cures effected* there is great danger of a relapse; certainly as great as with Peruvian bark.

4. It is certain to add to any existing diarrhea or nausea, and is liable to cause each, if they do not already exist.

5. In *remittents*, its effect, if any, is seen in a slow and gradual reduction of temperature, and this reduction is liable to sudden interruptions.

6. In *both forms* of malarial fever it is infinitely inferior to either cinchonidia or quinine; certainly as regards the immediate control of the fever, and, as far as we are able to judge, as regards relapses also.

7. From an economic point of view, the slowness and uncertainty of its action make its use in *hospital* practice fully as expensive as Peruvian bark.

8. There seems to be ground to believe that it can cause albuminuria.

9. In the large majority of cases of ordinary acute malarial poisoning it has no influence whatever.—*Am. Jour. of Med. Sci., July, 83.*

Nitrite of Amyl and Nitro-Glycerine in Uremic Asthma.—DR. SHEEN, of Cardiff, writes: "The brief notes I give below illustrate the value of nitrite of amyl and nitro-glycerine in one of the sudden and distressing, though perhaps rare, phases of chronic Bright's disease—viz., uremic asthma. Nitrite of amyl, acting, probably, through the vasomotor nerves, relaxes the arterioles, and thus reduces blood pressure. As it is very volatile, on the score of economy and convenience, I always carry some of Martindale's capsules in my bag, and these are very handy for immediate use. Nitro-glycerine is said to have much the same action as nitrite of amyl, and, according to Dr. Mahomed, its great superiority over amyl lies in its gradual and more lasting effect, and the more convenient manner of prescribing it, and it can be taken regularly two or three times a day, or oftener, one minim of a one per cent. alcoholic solution being the usual commencing dose. It is also made up in chocolate tablets, each containing one-hundredth part of a minim; but its action, when given in this form, is not so rapid as that of the alcoholic solution.

M. P., aged 55, retired from business May 4th, 1882. Has been ailing for two weeks, but has been about. Has noticed swelling of legs towards night for two months, and his face had swollen occasionally for the last month. Has always been careless of his health, and if he got wet, an event which happened not unfrequently, he would never change his clothes. He was taken suddenly ill last evening whilst out walking, about a mile from home, and had to be taken home in a cab. On visiting him at 10 A. M., I found him sitting up in bed gasping for breath, countenance distressed, and of a sickly pallid hue. Pulse feeble; temperature 98°; tongue pale and sodden; expectoration frothy, with some little blood intermixed; moist *râles* over whole chest, back and front; urine abundant, clear, containing one-fourth of albumen. At 2 P. M. I found his condition and posture unchanged; he could only speak a few words before he had to stop for breath. He inhaled three minims of nitrite of amyl (a capsule broken in a handkerchief). Within a few minutes his breath was easier, and he was able to recline in bed for the first time since the attack came on before I left the house. I then put him on nitro-glycerine one hundredth of a minim ter die.

May 5th. He was lying easily in bed, breathing quietly, and expressing himself as feeling quite well, said he was only waiting till I came before he got up. I cautioned him that his life hung by a thread, and that he could only hope to continue it by the strictest obedience. Unavailing caution. On the 6th he still remained in the same improved condition. The next day he refused to take any more medicine, but promised to stay in the house, a promise which he did not keep. On the 16th he had another attack, and died quietly within thirty-six hours, the urine being loaded with albumen.—*Brit. Med. Jour.*

Nasal Cough and the Existence of a Sensitive Reflex Area in the Nose.—DR. JOHN N. MACKENZIE has found by experiment that all parts of the nasal mucous membrane are not equally susceptible to the impression by which reflex cough is produced, and furthermore, that the cough or reflex area is probably limited to the mucous membrane covering the middle and inferior turbinated bones and the posterior half of the septum. Now this is the area occupied by the erectile tissue of the nose, and it is hard to resist the conclusion, that this structure is in some way connected with the evolution of the reflex act, and that the peculiar susceptibility to irritation is to a great extent intimately associated with its physiological functions, whatever they may be.

Roughly speaking, the greater the congestion or inflammation, the more constant the reflex obtained. He has succeeded, however, in producing violent paroxysms of laryngeal cough by simply touching, with the aid of the rhinoscope, the posterior extremity of the inferior turbinated bone in a person whose nose was free from disease.

That the sensitive area is principally confined to the parts indicated, is rendered exceedingly probable by the following clinical facts:

1. That in cases where reflex cough exists, these are the portions chiefly, if not solely, involved.
2. That the act may be produced here at will by artificial stimulation of the parts invaded by the morbid process.
3. That it may be dissipated by local applications to, or removal of the membrane covering the diseased surface.
4. That foreign bodies, such as pins, lodging in this area

sometimes give rise to cough, which latter is not observed when they become impacted in other portions of the nose.

5. That polypi give rise to reflex phenomena only when they arise from, or impinge upon the sensitive portions of the area.

6. That where complete atrophy of the turbinated structures exists, as, for example, in ozena, reflex cough is not present, nor can it be induced by artificial stimulation.

It is worthy of remark, that in a fair proportion of cases there are few, if any, symptoms which would direct the attention to disease of the nose, and this fact emphasizes the importance of examining the nasal chambers in all cases of the kind, even though the testimony of the patient may lead to neglect of their systematic exploration.

Dr. Mackenzie's clinical observation leads him to the belief that reflected irritation from nasal disease plays a not inconspicuous part in the etiology of laryngeal congestion and inflammation. The short, hacking cough and hyperemia of the larynx which occur in acute coryza are probably more often explicable on the theory of reflex action than upon the extension of the inflammation to the laryngeal vestibule. In chronic coryza, on the other hand, the constant laryngeal hyperemia induced by reflex nasal irritation, augmented, perhaps, by the frequent occurrence of cough paroxysms, may, if prolonged, eventuate in catarrhal conditions of that organ. In other words, on theoretical grounds, and clinical observation would seem to sustain them, it is legitimate to assume the existence of a *reflex laryngitis* evoked through the constant irritation of the vasomotor centers from chronic nasal inflammation.

Clinical and experimental investigation would appear, then, to lead to the following conclusions:

1. That in the nose there exists a definite, well-defined sensitive area, whose stimulation, either through a local pathological process, or through the action of an irritant introduced from without, is capable of producing an excitation, which finds its expression in a reflex act, or in a series of reflected phenomena.

2. That this sensitive area corresponds, in all probability, with that portion of the nasal mucous membrane which covers the turbinated corpora cavernosa.

3. That reflex cough is produced only by stimulation of this area, and is only exceptionally evoked when the irritant is applied to other portions of the nasal mucous membrane.

4. That all parts of this area are not equally capable of generating the reflex act, the most sensitive spot being probably represented by that portion of the membrane which clothes the posterior extremities of the inferior turbinated body and that of the septum immediately opposite.

5. That the tendency to reflex action varies in different individuals, and is probably dependent upon the varying degree of excitability of the erectile tissue. In some the slightest touch is sufficient to excite it, in others chronic hyperemia or hypertrophy of the cavernous bodies seems to evoke it by constant irritation of the reflex centers, as occurs in similar conditions of other erectile organs, as, for example, the clitoris.

6. That this exaggerated or disordered functional activity of the area may possibly throw some light on the physiological destiny of the erectile bodies. Among other properties which they possess, may they not act as sentinels to guard the lower air passages and pharynx against the entrance of foreign bodies, noxious exhalations and other injurious agents to which they might otherwise be exposed?

Apart from their physiological interest, the practical importance of the above facts in a diagnostic and therapeutic point of view is sufficiently obvious. Therein lies the explanation of many obscure cases of cough which heretofore have received no satisfactory solution, and their recognition is the key to their successful treatment.—*American Jour. of Medical Sci.*, July, '83.

HER ROYAL HIGHNESS PRINCESS CHRISTIAN, of Schleswig Holstein (Princess Helen, of England), has received a diploma as "nurse," having attended the course of lectures and passed the examinations at the Kensington Center Institution. This is the lady who translated the little volume entitled, "Early Aid in Injuries and Accidents," by Prof. Esmarch, who, by the way, is her brother-in-law.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, June 21, 1883.

OVARIOTOMY.

Dr. Gregory.—I had an ovarian case yesterday. An interesting feature in the case was the vast accumulation of fluid in the peritoneal sac that seemed to be encysted before the operation, but after the operation it was found that probably it was not encysted. The tumor seemed to apply itself in such a way to the walls of the abdomen that it seemed to be almost solid. The tumor was made up of small multilocular cysts filled with fluid, which was so thick that it would not run through even a trocar; it seemed to be almost gelatinous. The mass weighed thirty pounds, and was made up of cysts about as big as an orange. These were filled with this fluid. There was one cyst that was filled with yellow fluid, as yellow as pus, and seemed to be filled with flocculent material, just like flocculent pus. It stood out just exactly like an orange attached to the mass, and as yellow as pus.

Dr. Maughs.—Was it a projection of the sac?

Dr. Gregory.—Yes, a projection from the sac, filled with a purulent material. Not being able to remove the tumor through a short incision, I had to extend the incision past the umbilicus in order to get the mass out, and then it was squeezed out with a great deal of trouble. The incision extended from the pubes to two inches above the umbilicus. Before this there was a vast quantity of fluid discharged, which was evidently ascitic; and yet upon percussion there was no resonance, except in the epigastric region and a point in the hypogastric region along the course of the colon. In the hypochondriac region, right and left, you could get some

resonance, but the abdomen around the pubes was perfectly flat. Upon touching the fluid ever so lightly you had a wave running entirely across the abdomen, and it was suggestive of a very thin walled cyst. You could only detect the tumor by firm pressure, and it felt, while making firm pressure, as if you might rupture this cyst, which seemed to be so thin walled; but upon making firm pressure you could feel this firm mass behind, and you could even go far enough to make that project nearer to the finger. This mass could be felt reaching up to the stomach, reaching up to the spleen, and it seemed to press against the wall of the abdomen, and prevented the fluid from going in that direction, and it seemed to so encompass the mass that it was in fact encysted. When we had emptied this fluid, then, of course, I tried to empty the tumor, and I stuck a large trocar into one of the cysts, but the fluid was so dense that it wouldn't come out. I then enlarged the opening with my finger, and put my hand in and attempted to break down the sac inside with my hand, but the cysts were so dense, the walls of the several cysts so unyielding, that I couldn't do anything with them. I then took a pair of scissors and extended the incision until it was big enough to turn the mass out, and when I got the mass out it was connected on the left side by a pedicle three or four inches wide, which was ligated with two ligatures—two loops—and removed; and then upon investigation I found that the other ovary was diseased, but not enlarged; there seemed to be some enlargement, of course, but not a great deal, not enough to be able to make out the trouble through the abdominal wall, but there were these little sacs present, the Graafian follicles seemed to be enlarged, and seemed to contain a white pultaceous, putty like substance. The Graafian follicles of the right ovary were filled with a like substance—they were about the size of a marble. You could count, may be, a dozen of them, filled with a putty like material. I removed that ovary also, of course.

Dr. Papin.—Was the cul-de-sac of Douglas impinged upon?

Dr. Gregory.—It was not pressed into the vagina.

Dr. Papin.—Were there not some adhesions present?

Dr. Gregory.—None that we could discover. There may have been, but none were discovered. One of the ways in

which I diagnose the presence of fluid in the peritoneal sac is by pressure downwards of the walls of the vagina corresponding to the cul-de-sac of Douglas: in this case there was no pressure downwards. Then again we always suppose, when there is free fluid in the peritoneal sac, that if the patient lies upon her back this fluid settles down in the loins, and the intestines, filled as they are with gas, swim up and are found around the umbilicus, producing tympanites; but in this case the fluid was not such as we find in ascites, and the percussion around the umbilicus was just such as we have where there is a perfectly hard tumor—a solid tumor. The wave in this case was beautiful. No matter where you touched the loins, if you touched it ever so lightly, the wave passed completely across, and you could follow it with your eye across the abdomen. And then the idea of its being encompassed by a cyst, of course, associated the idea that there was danger of a rupture of the cyst; it seemed as if it were dangerous to handle it, lest there should be a rupture of the cyst and the fluid be turned into the abdominal cavity, but by making pressure you could feel a mass behind, and by further pressure and manipulation you could move this mass; so that when I incised the abdomen, I did so very carefully until I cut down to the perineum; there the perineum projected, and it was a question whether it was an intestine. We examined it, and found that it was not an intestine. I felt satisfied that there would be a gush of fluid when I opened it; and when I made the incision there was a flow of fluid which filled—well the quantity was very large, and when we emptied this fluid out of course we perceived the cyst, and we found that it consisted of a large number of cysts.

Dr. Coles.—How has the temperature been?

Dr. Gregory.—Generally above the normal. It was about normal on yesterday morning. At the time of the operation the pulse was 116. The patient looks pretty well; she says she feels very uncomfortable; she feels as if some one were tramping on her abdomen.

Dr. McPheeters.—How old is the patient, and how many children has she had?

Dr. Gregory.—She is about thirty-five years of age, and she has never had any children.

Dr. Coles.—How long has she had the tumor?

Dr. Gregory.—Five or six years. One of the interesting features about the case was that there was not a single adhesion—not a single point of adhesion; or if there was it escaped my attention; and it is the only case of ovarian cyst that I ever saw in which there was no adhesion.

Dr. Prewitt.—How long was the pedicle?

Dr. Gregory.—About three or four inches wide and thin. We got a beautiful operation; it was perfectly satisfactory; I don't care to have any better operation.

Dr. Coles.—There is one point, and a very interesting one, I think, upon which I would like to hear the opinion of the members, and that is the relation of ascites to certain tumors. Why is it that we have a large accumulation of ascitic fluid in certain apparently benign tumors of the abdomen, and in others we do not? It is not a certain or positive evidence of malignancy, though it often does occur that ascites accompanies tumors which are malignant in character. I would like to hear from Dr. Gregory a little upon this subject.

Dr. Gregory.—It seems to me that where there is ascites the case is not so favorable as where there is no ascites; I think the presence of ascites is rather indicative of some complication that is not the result of an ovarian tumor, but the result of some visceral trouble, perhaps, just as ascites comes under ordinary circumstances; yet there is no evidence of visceral trouble in this case. The very fact that ascites is present is warrant for assuming that there is a complication, and that it is not the result of the presence of the tumor in the belly, but of some visceral trouble or other trouble which usually determines the presence of ascites. I never think they are as favorable cases where ascites is present as where it is not present.

Dr. Coles.—And yet some cases in which ascites is present turn out remarkably. The ascites in this case was probably due to a slight oozing of fluid from a cyst, likely the one which was most prominent, and which contained purulent matter.

Dr. Gregory.—Yes; and that fact is most extraordinary. In this case, the peritoneum was very much changed in appearance; it didn't look like a healthy peritoneum. The peritoneal surface generally was congested.

Dr. Coles.—Were there any flocculi, doctor?

Dr. Gregory.—No, none, except what escaped from the cyst.

Dr. Prewitt.—Was the ascitic fluid of rather a dark color.?

Dr. Gregory.—The fluid was not transparent; it was dark in color; it was a little smoky, and it was not perfectly thin; it was a little consistent. It was evidently a pretty concentrated solution.

Dr. McPheeters.—I would like to hear from Dr. Papin.

LACERATION OF THE PERINEUM.

Dr. Papin.—I don't know anything that I could add to this case. But I recently operated upon a case of lacerated perineum where the sphincter was completely lacerated. Dr. Mudd was kind enough to assist me in this case. It was suggested that I attempt to coapt the lacerated ends of the muscle—of the sphincter; and I really paid more attention to the approximation of the surface than to any other portion of the operation, and I was successful in my efforts in so far that I restored the sphincter completely. It is now six weeks—nearly two months—since the operation was performed, and I examined the patient only a few days ago, and found that she had complete control over the sphincter; the perineum itself was not as extensive as I would like it to have been, but to all intents and purposes the operation relieved the woman from the affection from which she was suffering. I think this is a point in the operation which is worthy of attention, and one which I shall ever hereafter pay especial attention to—to attempt to restore the sphincter.

Dr. McPheeters.—How long was this after labor?

Dr. Papin.—This was about seven years ago that the laceration occurred. A remarkable circumstance about this woman was that I refused to operate all along, for years back, because the woman seemed to keep pretty well; but finally the rectocele made its appearance, which annoyed her very much, and her general health gave way during the last fall and winter to such an extent that at her urgent request I operated, and I think very beneficially.

Dr. McPheeters.—If the sphincter ani was ruptured, how could she retain fecal matter?

Dr. Papin.—She couldn't retain anything except fecal matter

of a certain consistency; if she had anything like diarrhea, it passed involuntarily—she had no control over it; but, nevertheless, as this did not seem to occur very frequently, and her general health was good and her menstrual periods perfect, I refused to operate for a long time. During the last summer and fall she had been obliged to do a great deal of her own work. She is a woman who has always heretofore been in comfortable circumstances and has had servants, but of late she has had to do her own work, and she lived in a house where there was a good deal of going up and down stairs, and these things altogether brought on this complication, so that this interference was necessary. The operation seems, so far as I can tell, to be a perfect success.

Dr. Coles.—Don't you think, in those cases probably, that nature sometimes provides a provisional sphincter?

Dr. Papin.—Perhaps so, but I have never been able to find it, except there is an actual constriction of the bowel; but in this case, unless the woman had diarrhea she had control over her bowel; but when diarrhea came on she had no control over it at all, and the stool would pass from her suddenly. This became so disagreeable to her that it was necessary to do something to improve her condition. There was no absolute necessity for an operation until last fall, and still I postponed it until about seven weeks ago.

Dr. Prewitt. — Was the rectocele preceded by retroversion and prolapsus?

Dr. Papin.—No; but the tendency was rather towards a dipping of the womb accompanying this rectocele.

Dr. Coles.—Did you take away much of the tissues at each end of the sphincter?

Dr. Papin.—No, sir; I followed a method that Dr. Gregory taught me some years ago of cutting open the true skin, and dissecting it very far out; I dissected it nearly an inch, and with a little material from above the sphincter I supplied the loss very carefully. At the suggestion of Dr. Mudd, I attempted to restore the sphincter, and the operation proved to be a complete success. It was really a very satisfactory operation. I told the lady the other day that I wished she would get a diarrhea just to test the power of the sphincter, as it would be a great comfort to know that she had power over it.

I introduced my finger into the rectum, and told her to contract the sphincter, and she did so with quite as much power as is usual in those cases.

CYSTOCELE.

Dr. Prewitt.—I recently saw an old lady who came to me complaining of some trouble with her leg; and she told me that she had trouble in getting her bowels to move, and trouble in passing her water. She said that she couldn't pass her water unless when standing up; that she suffered with hemorrhoids and a supposed falling of the womb—retroversion. On making an examination, I found that the womb was pretty high up; there was a cystocele, subrectocele, and more or less laceration of the perineum. The sphincter was not lacerated, I believe. After examining the case, I was a little at a loss to understand why there should be such a decided cystocele, as the womb was comparatively well in position, and the rectocele was not so marked. I take it that the trouble in evacuating the bladder was the result of the cystocele, and the trouble in evacuating the bowels also largely due to the rectocele. The womb was, as well as I could determine, somewhat larger than it ought to be. I couldn't say that it was retroverted, as I could scarcely reach it. I reached the cervix, and the posterior two-thirds of the cervix seemed to be lacerated, leaving comparatively a sharp opening in front.

Dr. Papin.—Did you probe the womb?

Dr. Prewitt.—I did not. There was some malposition, but not as much as I expected to find.

Dr. Papin.—It is hard to make a diagnosis in a case of that kind without probing.

Dr. Prewitt.—Yes; but where you have rectocele, and the bladder dragged down, you expect to have the uterus dragged down.

Dr. Gregory.—What about the leg?

Dr. Prewitt.—It was a curious condition of things; but that is not gynecological.

Dr. Gregory.—It might have been connected with the others.

Dr. Prewitt.—No; she had a chronic trouble of the joints—a displacement of the tibia backwards; and there had been ulceration about the legs, and there were old sores about the

limb for which she wanted something done.

Dr. Papin.—Was there any specific element about it?

Dr. Prewitt.—I can't say that there was.

A NEW PESSARY.

Dr. Barret.—A professional friend of mine, Dr. Chapman, of Whitehill, Illinois, called on me a few days since and gave me an instrument like this, and gave me this to hand to Dr. Boisliniere. This is an instrument that he has constructed for anteversion of the uterus, and he says that, in the limited number of cases in which he has used it, it has given him satisfactory results. I have no doubt that it perhaps would answer the purpose in some cases — comparatively few, I imagine, because there are few cases that will stand the pressure upon the base of the bladder. It is Hodge's pessary curved forward instead of backwards. The manner in which he has bent the instrument is to me the least interesting part of the thing; the part which interested me most is the manner in which the instrument is made. It is made by taking a piece of iron wire and passing over it an India rubber tubing, and can be made in a few moments. I have made one. It costs only a few cents, and it enables us to make a pessary of any desired shape.

Dr. Coles.—Don't you think this sort of pessary would soon smell offensively? and would't it produce irritation?

Dr. Barret.—I don't think that it would; the wire is completely covered.

PROLAPSE OF THE CORD.

Dr. Coles.—I have a case that I would like to report, Mr. President, and it is interesting as showing the vitality of the fetus under some circumstances. I had a case last winter of a lady who received some severe burns, causing great injury and shock; and she informed me at the time she was burned that she supposed she was pregnant, as she had passed a period; she was always a little irregular, at least she always had some little show of blood every month or two after she became pregnant; and she had been having slight flows of blood. A week after she was burned, she called my attention to the fact that there was an almost continuous flow — there had been quite a discharge of fluid from the vagina—and she wanted to

know what she must do about it. I said, do nothing. She was obliged, on account of the burns, to keep quiet. I had to give opiates, anyway, and these were calculated to prevent miscarriage. This continuous discharge of fluid, not in such great quantities, but to some extent, kept up for some month or six weeks, and at times there was a slight stain of blood, but no hemorrhage. She was obliged to wear a napkin on account of this discharge. She finally recovered so far as to be able to go out on the street, and went down town shopping, and, after having been exercising and going about pretty freely for two or three weeks, she sent for me, and said there was something protruding from the vagina; she did not know what it was. I supposed, perhaps, that it was a mucous polypus or something of the sort. Upon making an examination, however, to my surprise I found that there was a prolapsed cord, and that this cord was pulsating. I should judge from the size of the cord and other circumstances that she was perhaps four or five months advanced in pregnancy. I did not think it worth while to undertake to reposit the cord, because I inferred that of course the membranes were ruptured and the liquor amnii had escaped, and that, in all probability, my efforts to reposit the cord would be futile. I told the patient to keep quiet. Matters continued in this state for seven or eight days, which she passed most of the time in a horizontal position; not all the time lying down, but she remained in her room. One night one of her children stumbled and was about to fall, and she made a sudden effort to catch it; she was taken with a pain, and immediately the fetus escaped on the floor. She said the fetus was alive. It was not alive when I got there. The fetus was in a good state of preservation, and showed signs of recent death. The fetus was certainly five months advanced.

Dr. Papin.—Did you preserve it?

Dr. Coles.—No, sir; I did not. The point of interest in the case was the fact that the fetus thrived and grew for seven or eight weeks after the rupture of the membranes, and she moved about freely upon the street, and walked a mile with this cord protruding from the vulva.

Dr. Barret.—How far did it protrude?

Dr. Coles.—It just came down far enough for her to feel that there was a foreign substance; not enough to get dry.

Dr. McPheeters.—Was there any gush of waters when the fetus came away?

Dr. Coles.—No, sir.

Dr. Barret.—You say it hung down in the vulva?

Dr. Coles.—Yes, sir.

Dr. Barret.—Are you sure it was the membranes that ruptured?

Dr. Coles.—Well, yes; I presume, of course, that if the cord was hanging down the membranes must have been ruptured; and connecting that with the history of this continued flow of water for six or eight weeks, and the fact that there was quite a gush at first, I concluded that the membranes were ruptured, and the amniotic fluid had escaped.

Dr. Maughs.—There could not have been prolapse of the cord without previous rupture of the membranes.

VANDERBURGH COUNTY MEDICAL SOCIETY.

EVANSVILLE, IND., MAY 18th, 1883.

The above named society convened, with the president, Dr. J. W. Irwin, in the chair.

The evening was occupied with the reports of cases from practice. Dr. E. Walker related a case of fracture of a metacarpal bone which he had just seen a few moments previously, and spoke of the difficulty he experienced in keeping the parts in apposition. For the present he had applied a temporary dressing, consisting of a compress and wooden splint.

In the discussion that followed, Dr. B. J. Day said the right thing to do in such a fracture was to make use of force enough to keep the parts in apposition without producing pain, and for this pupose he had found the application of two straight splints the most serviceable.

Dr. Irwin related two such cases that occurred in his practice recently—one of which he treated with palmar and dorsal splints, filling up the hollow of the palm with cotton. Union took place, but the part did not look very neat. The

other, an oblique fracture, he treated with a felt splint, first moistening the splint and moulding it to fit the part. He had a good result and no deformity.

Dr. Compton had a similar case, in which he made use of the plaster of Paris dressing. This he applied only to one half of the hand, and when it hardened it held the parts firmly together, resulting in a perfect cure.

Dr. Irwin presented a case of poisoning from chlorate of potash, the first that had occurred in his practice of ten years' duration. The patient, a child of two and one-half years of age, had been suffering from aphthæ, for which he prescribed a mixture containing chlorate of potash in the proportion of one dram of the salt to two fluid ounces, with the directions that the same be used as a wash and given internally in teaspoonful doses every two hours. The next day it was found that the potash had been given every hour, and the child's abdomen was becoming very tympanitic and its stomach quite irritable, with extreme thirst and nausea, but little vomiting. The urine was almost suppressed and of a brownish hue. When examined under the microscope, it was found to contain blood cells and a heavy deposit of uric acid. The bowels were loose, discharging thin, yellowish brown feces. Fresh butter, albumen and demulcent drinks were freely administered, and at the time of making this report the child was convalescing.

In the discussion that followed, Dr. Day remarked that the man who first described chlorate of potash died from its use, he having taken at one dose as much as one ounce of the drug. He died *promptly*, with all the symptoms of gastro-enteritis.

Dr. Brose reported a case of boracic acid poisoning. His patient had a large chronic sore on the left thigh, which was first treated with the hot iron and poultices. Subsequently powdered boracic acid was dusted over the part. Great depression followed, the pulse becoming very rapid—at one time reaching 140. Facial expression very anxious, with staring eyes. Obstinate vomiting and purging occurred, followed by suppression of urine. Alkalies were administered, but these only aggravated the emesis. Stimulants were then resorted to hypodermically without any apparent effect. The patient died from cardiac failure. An autopsy, with micro-

scopical examination, revealed parenchymatous and interstitial changes in the liver, with great irritation of the renal epithelium. There was much gastro-intestinal inflammation, and the stomach presented several erosions, with extravasations of blood.

Dr. Irwin then presented the case of a young lady, æt. 18, with abscess of the parotid gland. He opened it, and found a small quantity of grayish green pus. This was followed by pain and rigors all over the body. Although the general state of health had been good previous to the formation of the parotid abscess, pneumonia developed, from which she recovered only to be attacked by pain locating itself about four inches below the knee, over the anterior surface of the tibia. The limb from the knee down was somewhat swollen, but presented no redness or elevation of temperature. Frequent rigors caused him to suspect the presence of pus, and an incision was made at this point, which revealed a considerable quantity of pus apparently arising from beneath the periosteum. The wound made by the knife healed up in due time, and she improved; again rigors occurred, followed by pain beneath the left deltoid muscle. Pus was again discovered by the knife. The pain next developed near the left elbow, on the posterior surface of the ulna. Here, again, a free incision permitted the escape of more pus. At this time, the mammary gland is the seat of a large abscess. What the ultimate result may be he hoped to be able to lay before the society at a subsequent meeting.

Dr. Day was the first to make remarks. He said he always entertained more or less fear in opening abscesses. He thought that too much care could not be exercised in preventing the ingress of air. In his opinion, the introduction of air that followed the opening of the parotid abscess was the cause of subsequent pneumonia.

Dr. Compton thought it a case of blood poisoning, coming from the condition of the parotid gland. In regard to treatment, he thought whiskey was the giant remedy in pyemia and allied conditions attendant upon impure secretions.

Dr. Brose thought there could be no question as to the case being one of blood poisoning.

In closing the remarks, Dr. Irwin said he thought the case was one of pyemic abscess from the beginning, and his treat-

ment had been directed accordingly, the details of which he would give after the case had terminated.

The meeting then adjourned.

Stated Monthly Meeting, held July 19, 1883.—The President, Dr. J. W. Irwin, in the Chair.

BOVINE OR HUMANIZED VIRUS.

The stated business of the meeting was the reading of a paper by Dr. C. E. Lining, entitled "Observations on Small-pox." The paper was quite lengthy, and devoted chiefly to the subject of vaccination. The author did not consider any case of vaccination complete that failed to show the characteristic cicatrix. He quoted from the writings of several observers on this point, and described the cicatrix as being either circular or oval in form, depressed and punctated in its center, with a shining aspect. He said experience had taught him that vaccination, in order to be protective against small-pox, should be performed often, and each time three or more points of insertion should be made. As to the proper kind of virus to use, he spoke in laudatory terms of the humanized, and much preferred it to the bovine. While a resident of South America he had vaccinated one thousand cases from arm to arm, with not more than a dozen failures. In the remarks that followed most of the members present took part. Dr. Linthicum wished to know if the characteristic mark could be seen in every case after vaccination Whether deep ulceration might not obviate pitting? saying that he had used some bovine virus that had caused deep tissue destruction, and the formation of whitish, smooth scars. Nevertheless he felt that the bovine virus was the safest, and he was satisfied that if made use of when fresh it would produce the characteristic sore. He feared syphilis from the use of the humanized virus.

Dr. E. Walker doubted the virtues of bovine virus, as it was hard to get it to take. He had seen it followed by ulceration and sloughing and also small-pox. Humanized virus had, in several instances, taken after it. He was in favor of vaccinating from arm to arm, as he had seen a patient who had seven good scars from bovine virus subsequently have the small-pox. The use of more than a single scar he did not understand.

Dr. Pollard thought that the humanized virus took better.

Dr. Compton said that wherever the skin had been destroyed by ulceration the characteristic scar was not visible. He had always been afraid to trust to such scars as a means of protection, but yet there were cases of traumatic injuries after vaccination that might be considered safe. He thought bovine virus was probably the most to be relied upon as a preventive of variola. Most of the failures to take after such virus, he believed, were due to the previous decomposition of the lymph. He was the first and only one in this part of the state to cultivate bovine virus, and his experience with it when freshly used was most satisfactory, as he had made twenty consecutive vaccinations without a single failure.

Dr. Brose said that small-pox did not always confer immunity, as a case had come under his observation, while a resident of the German Hospital in Philadelphia, that many years ago, in Princeton, New Jersey, had had small-pox. The attack under observation had an incubation of twenty-seven days, was confluent, and resulted in death.

Dr. Irwin had, during the past three years, vaccinated upwards of three thousand persons with bovine virus, most of w :h was obtained from the New England Vaccine Company, at Chelsea, Massachusetts, and about sixty per cent. of the cases in whom vaccination had not previously taken effect had typical sores. In only one instance had sloughing occurred, and it was caused by a traumatic injury. He had made use of some bovine virus from the north and western states, and in nearly every instance did it fail to take. Of late, he had been using some carefully selected humanized virus, with apparently good results. He thought that if bovine and humanized virus were made use of equally fresh, the best protective results would follow the former. Most of the failures after the use of the bovine virus, he believed, were due to its age and imperfect solubility, as it took a much longer time to dissolve bovine than humanized lymph. He favored the use of the fresh lymph from the cow, as being the surest and safest means of protection from variola.

Dr. Lining said, in closing the discussion, that the characteristic mark could be seen in all cases after vaccination, except where ulceration had destroyed the outline of the scar. When

he started out as health officer, over one year ago, he had an idea that bovine virus was the most to be relied upon, but of late he had been led by experience to change his views and regard the use of humanized virus as being the best means of protection from small-pox. Virus from healthy young children should be made use of, and the arm to arm method, he thought, was the most reliable.

E. L. CARTER, M. D.,
Secretary.

THE AUSTRALASIAN JOURNAL is responsible for the following story: A man who had lived for some time among the shakers in New Caledonia, left the tribe and killed two men who were sent to bring him back. The natives were greatly incensed, captured the man and—ate him. But every one who shared in the repast died with symptoms of poisoning, the man having been syphilitic!!!

LEPROSY IN THE SANDWICH ISLANDS.—It is estimated that there are about sixteen hundred lepers in the kingdom, six hundred of whom are confined to the leper colony on the island of Molokai and one hundred in the leper hospital at Honolulu. Of the nine hundred at liberty the majority live in and around the metropolis. These lepers are constantly marrying non-lepers, and there seems to be no fear of the disease either among the pure Polynesians or half-castes. Foreigners generally experience immunity from it, though the man Derby who turned up recently in Salem, Mass., was a well known leper in Honolulu for many years. He enjoyed the kind considerations of a native leper woman during the greater part of his residence in the island, and it was from her that he contracted the disease. Dr. Fitch, now in charge of the leper establishments, regards leprosy as a consecutive form of syphilis, and treats all lepers under his care with liberal doses of the iodides and mercurials. Under this treatment the patients improve, and when taken in its incipiency the disease is often arrested.—*Boston Med. and Surg. Journal*, July 12, '83.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

LONDON, August, 1883.

The Royal College of Physicians of London gave a conversazione at the beginning of July, at which all the chief members of the profession were present, and many of the nobility. His Royal Highness the Duke of Albany arrived at the college about ten o'clock in the evening, and was conducted over the building by Sir Wm. Jenner (the president) and the censors of the college. His Royal Highness was shown all the scientific and medical objects collected and on view for the occasion; he manifested great interest in an experiment which demonstrated the cause of fog. This was shown by Mr. Cottrell, who tried to prove that for the production of fog it was necessary to have very minutely divided particles of matter in the atmosphere, on which moisture becomes condensed. He had a very strong, perfectly transparent cylinder of glass, through which was drawn, by means of an air pump, perfectly pure filtered air, but heavily charged with moisture. No evidence of fog was then present. Another glass globe contained a small piece of platinum, which could be rendered incandescent by an electric current. The small amount of matter produced by this combustion was invisible to the naked eye, but when the air from this glass globe was allowed to pass through the cylinder fog immediately became visible.

London is troubled, especially in the winter months, by dense pea-soup fogs, due to the condensation of aqueous vapor on the particles of carbon produced by the smoke. It has become such a serious matter with regard to the health of the metropolis that a society has been formed calling itself "The Smoke Abatement Society," which is investigating the matter scientifically, and trying to devise means for reducing the amount of smoke. Of this society the Duke of Albany is president, hence his interest in the above experiments.

I little thought when writing you my July letter that a change would so soon be wrought in the nursing arrangements of one of our hospitals. King's College Hospital has at last relieved itself of an incubus in the shape of the St. John's Sisters, who formerly nursed and tyrannized in its wards. A quarrel broke out between the hospital staff and the Mother Superior. The Mother Superior thought she would be able to carry everything her own way, as was done some ten years ago, and all the Sisters supported her. It ended in their having to withdraw from the hospital, which they did in a body, the resident officers and students waving their handkerchiefs and kissing their hands to them on their departure. There is now a chance that King's College Hospital may have a good entry of fresh students next October. The medical school had sadly gone down during the last few years.

The difficulties between the nurses and doctors in England has been a growing evil for some long time, and had culminated at different periods in open war at several of the hospitals, much to the disadvantage of those institutions and to the mortification of the medical profession. The nursing departments have come under the influence and control of semi-religious sisterhoods, who have assumed command over the wards, and brought forward pretensions that quite alter the relation of the medical man to his patient, making the sick not the patients of the medical men but of the nurses; the doctor only being called in to prescribe, a function not yet assumed by the nurses. The interference with the medical education at some of the hospitals is becoming a most serious evil.

At St. Bartholomew's Hospital there is a vacancy on the staff. Dr. Southey, the second full physician, has resigned, having been appointed a Commissioner in Lunacy, a post which necessitates the visiting of all the lunatic asylums in the kingdom at stated periods. There are about nine of these commissioners, paid by the state, who have to see that the lunacy laws are not infringed. About half the number of these commissioners are medical men.

The resulting probable vacancy on the staff of assistant physicians at St. Bartholomew's has already brought forward eight intending candidates, all gentlemen of the highest qualifications and all eminently suited for the post. These young

men have been kept about the hospital holding junior ill-paid appointments with the hope of ultimately coming on the full staff. It is very evident that places cannot be found for all of them, and probably this plethora of candidates will open the eyes of the governors and members of the staff of the hospital to the injustice done to these young men, who are allowed, when they ought to be taking root elsewhere, to expend their energy in the service of the hospital without a chance of being adequately rewarded.

At St. Mary's hospital, Dr. de Watteville has been accorded the status of a full physician in charge of the electro-therapeutic department. This is the first appointment of the kind made in England. Dr. de Watteville has devoted much time to the scientific investigation of the physiological effects of electricity upon the human body; the variations in the "reaction of degeneration" of muscles, and the differences manifested by muscular contraction in affected muscles when the lesion is primarily in the muscle and when secondary—due to some affection of the nervous system.

The prevalence of cholera in Egypt is causing much more consternation in other European countries than in England, although the intercourse between England and Egypt is on a larger scale than between Egypt and any other country. The great reason for this difference is a certain sense of security that is felt in this country, our sanitary arrangements being supposed to be perfect enough to cope with any outbreak. It is a satisfaction to have some return for the vast sums of money that have been expended of late years in improving and perfecting our system of sewage and insuring a pure and sufficient water supply. The outbreaks in this country in 1849 and 1854, and again in 1866, were almost identical in area with the water supply of certain water-work companies. The rapid spread of the disease in Egypt is not to be wondered at, when it is the common custom of the country for its inhabitants to defecate into the rivers and other open water-courses, from which they also draw their water supply. The Nile barracks at Cairo, which are perhaps the largest in the world, and capable of accommodating 10,000 men, with a residence for the minister of war, have no such thing as a privy or water-closet in the whole building. The greatest source of danger of the

spread of the epidemic to England is connected with the importation of old rags. Large quantities of these old rags are sent from Egyptian and Turkish ports to this country, to be torn up for the purpose of making paper. It would no doubt occur to the Egyptians that the easiest method of getting rid of their infected clothes would be to send them as old rags to England, a country they would not feel over anxious to spare at the present time. Fortunately, our government has already taken measures for the detention and disinfection of these cargoes. It would seem that America is also exposed to the same danger, for one of the cargoes of rags that was prevented being landed at Liverpool last week was only intended for transshipment to America.

An attempt has been made to establish at each of the hospitals, commencing with the metropolitan hospitals, a volunteer army service corps, to serve the volunteer army as the army medical department does the regular army. This corps is to be composed of students, who will be trained to all the duties performed by "bearer companies" and "hospital orderlies" in the field. They will be taught how rapidly to clear a battlefield of the wounded, and how to attend to the wounded "under fire." In introducing the subject at a meeting of the students of St. Bartholomew's hospital, Sir Sydney Waterlow described what he had seen of an ambulance service in connection with some of the hospitals in New York; how, when an accident occurred in any part of the city, telegraphic or telephonic communication was made by the police with the nearest hospital, and an ambulance thoroughly equipped and manned by students was dispatched at once to the scene of the accident, and the injured person brought into the hospital. He hoped that such an ambulance service would soon be connected with every hospital in London.

Within the last month the Queen has been graciously pleased to confer several honors upon the medical profession. Dr. Andrew Clark and Mr. Prescott Hewett have been made baronets; and Dr. Pitman, the registrar of the Royal College of Physicians, and Mr. Edwin Saunders, dental surgeon to the Queen, have received the honor of knighthood. These distinctions confer upon the recipients the title of "Sir." The title becomes hereditary in the family of a baronet and de-

scends to the eldest son, but in the matter of a knight it is only held by the recipient during his lifetime. Two of the leading medical men in Dublin also were selected for the honor of knighthood, but the proverbial Irish dissatisfaction at once cropped up, and a grumbling was made because the Irish medical men had not been offered baronetcies. Mr. Porter, surgeon to the Queen, accepted the title offered him, but Dr. Banks declined to accept a knighthood. This unseemly and ungrateful conduct on the part of the profession in Ireland has nothing to excuse it. The honors granted to the profession are perfectly gratuitous, and to which they have no claim whatever. A medical man is perfectly at liberty to decline any mark of favor offered him, but he has no right to complain that the honor is not sufficient to his deserts. It must be borne in mind that the number of eminent men in Dublin and Edinburgh cannot be compared to the number to be found in London; in fact, there is a continual migration from both of the former cities, of those men who have made a mark, to the more lucrative sphere offered them in this metropolis. Custom obliges her Majesty to have appointed physicians and surgeons in the two secondary capitals, but their services are seldom sought or required. The rank of baronet or knight does not confer the right of a seat in the house of lords; this is reserved to persons holding higher titles and called peers. The medical papers have been suggesting that some members of the medical profession should be raised to the peerage. To maintain the position and perform the duties of a peer of the realm requires more money than it ever falls to the lot of a medical man to acquire; and in these democratic days (I use the term in a different sense to which it is used in the States), when it is difficult to get a suitable provision made for the children of the Queen, it is not to be expected that parliament will vote money to maintain a medical man in the position it would be necessary for him to assume in the ranks of the nobility. If he could not be placed in this respect on a certain equality with those with whom he would have to mix, he would be far happier with some of his old fellow students in the wards of a workhouse than on the benches of the upper house.

E. V. A.

CONTINENTAL LETTER.

PRAGUE, Aug. 1, 1883.

Knowing how much time is lost, if one does not know the advantages of the different European clinics, I wish to give some information concerning Prague that will be of interest to gentlemen contemplating studying in Europe.

Prague is, without exception, the best place for midwifery in Europe—more advantages being given in the examination of pregnant women, in delivery and in operations than in Vienna, which is considered to be the best by those who have not tried it. The lying-in hospital, completely separated from the general hospital, is an immense structure, built on a hill overlooking the city, where one can follow the practice as well as the theory of hygiene. There are about 3,000 births in the year, women being taken in four or five weeks before their time, and after bearing are kept in bed until they have perfectly recovered.

Three wings of the hospital (consisting of twelve rooms and seventy-two beds) are kept in reserve for the mothers—the same number for women before bearing. Two large rooms, called the clinic rooms, are used for the lying-in. A change is made every six weeks, from one to the other.

The gentlemen attending live in the hospital, and are summoned by a bell to every birth, night and day. They have the liberty of examining all women when they will.

In the morning the visit is made through the wards, and all diseases or complications pertaining to the after lying-in period are there for the student's eye and hand.

It is better to attend during the summer, as in winter Prof. Streng delivers his lectures in Bohemian. In summer his first assistant, Dr. Rubeska, a most thorough teacher and gentlemanly companion, takes his place, and will, if agreeable, give his course in the English language.

The scheme is as follows: On presenting one's-self he is allowed a bed in the caserne of the hospital, for which he pays ten florins (four dollars). Dr. Rubeska's course is twenty-five florins (ten dollars), which is nothing compared to other places. This course consists of touching and diagnosis in the clinic, and delivery of normal cases, at the same time attending all

operations, forceps delivery, etc. The students go through the operations under his guidance—first on the phantom, then on the living subject. The verdict of all Americans that have attended here is, it cannot be beat.

W. R. ENDRES, M. D.

DIGESTION OF STARCH BY INFANTS.—DR. JNO. M. KEATING, as the result of an extended series of experiments carried on at the Philadelphia hospital, reaches the following results, which form the conclusion of a paper which he read before the Philadelphia College of Physicians and Surgeons June 6, 1883:

The saliva of some infants possesses the property of converting starch into glucose regardless of age.

The age of the infant cannot be taken as an indication of this property of its saliva.

When such a condition is found to exist, a small quantity of well-prepared farinaceous food is valuable as an element in the diet, incorporated with mixed cow's milk.

An examination of the stools of children so fed would be a guide as to the quantity of starchy food to be used, and when farinaceous food is employed slow feeding is probably preferable to the bottle.

DR. N. H. RANDOLPH read a report supplementary to the preceding paper, containing the result of the microscopic examination of the feces of twenty-four starch-fed children. Eighteen of these contained no starch, or only a trace, and his conclusions, given below, fully corroborate those of Dr. Keating.

The facts presented appear to justify the following conclusions:

First, that *many* infants of under three months can digest starchy foods.

Second, that the individual variations in this regard are so numerous that no broad and general statement can be made as to the period at which infants *begin* to digest starches; and

Third, that the physician can be absolutely certain that a farinaceous ingredient in the diet of a young infant is beneficial only by an examination of the dejecta under such diet.

COMMUNICATIONS.

UTERINE POLYPUS.

BLACK MINGO, S. C., June 20, 1883.

MR. EDITOR: As I see very little in your journal from this state, I will report the successful removal of a polypus from the uterus, which occurred in my practice a short time ago.

Mrs. ——, æt. 25, while menstruating, was taken suddenly with hemorrhage from the womb. Thinking it a case of simple menorrhagia, the usual remedies were put into requisition to arrest the flow. The treatment, however, was unsuccessful, and the hemorrhage kept on even after strong astringent injections had been resorted to.

Suspecting something wrong with the womb, an examination was made, which revealed the fact that almost the entire cavity of the uterus was filled with a polypus, about the size of a hen's egg. The pedicle was attached to the fundus, and the base partly protruding through the os. The finger could be introduced a short distance into the uterus, and passed entirely around the tumor at its lower portion. After diagnosing the case, two unsuccessful attempts were made to pass a ligature around the neck of the tumor; but, as before mentioned, the cavity of the uterus was so well filled that it was impossible to get the ligature beyond its base.

The attempt to remove with the ligature was therefore abandoned, and resort was made to ergot internally, to cause contractions of the uterus and expulsion of the tumor by that process, while strong astringent injections of solution of the subsulphate of iron were made to arrest the immediate flow, which was showing on the patient's strength by this time. One half dram of fluid extract of ergot and ten drops of tr. ferri chloridi was given every two hours till three or four doses were given, when the polypus was ejected entirely out of the vagina on the bed.

There is no doubt in my mind that the attempt at ligating the tumor had a great deal to do with its coming away as soon as it did, as I worked at it a considerable time during both attempts, which was enough to partly detach it. As soon as it was expelled the patient was given another dose of ergot and iron, and in a short time the hemorrhage had ceased entirely.

The patient was then put upon iron treatment—tr. ferri chl., twenty drops three times a day for three or four days—after which she resumed her usual household duties.

T. P. STEELE, M. D.

RAILROAD SURGEONS.—The United States consul at Stockholm states in one of his reports that on the government railways of Sweden there is generally a physician for every fifty-two kilometers (thirty-two miles) of the line of road, and forty-four physicians altogether are thus employed upon the government roads. The private railways have a medical service closely resembling this system. One of the duties of the medical men is to examine all applicants for employment, and those found laboring under any physical disability such as to disqualify them for duty are rejected. Particular attention is paid to color-blindness and other defects of sight and hearing among those engaged in the movement of trains. They are also required to give their professional services to all those who are entitled to the same.

Relief is granted to the following: (1.) All those injured by accidents upon the lines. (2.) In ordinary sickness to regular employés and their families. (3.) To other employés while in actual service. (4.) To laborers in the shops who have paid the same contribution as is required of those in the operating department, and also to their families. (5.) To extra laborers who fall sick or are injured while on duty. All the above are also entitled to medicines at the expense of the company while under medical treatment. No exception is made against those who have contracted injury or disease by their own fault, as in case of drunkenness, brawls or venereal infection.—*Boston Med. and Surg. Jour.*, Aug. 2, 1883.

SELECTIONS.

REPORT OF A CASE OF RESECTION OF THE RADIUS PERFORMED BY JOHN RHEA BARTON IN 1828.

BY WM. BARTON HOPKINS, M. D.

[*Read April 4, 1883, before the College of Physicians and Surgeons of Philadelphia.*[1]]

This patient came under observation a month ago at the Episcopal Hospital, where she came with her son, who had received an injury of the head.

The account which she gives of an operation performed upon her fifty-four years ago, by Dr. John Rhea Barton, is in many respects incomplete, but when it is considered that more than half a century has elapsed, that she was only ten years old at the time, and that during all this interval she has never been questioned particularly in regard to the operation, or to the disease which gave rise to it, her description will appear vivid, and an adequate idea may be formed of the deep impression which was made upon her memory by undergoing a painful surgical operation without anesthetic.

She says that when she was ten years of age she was taken, in the spring or early summer, to the Pennsylvania Hospital for a disease of the forearm, which it was thought, followed a sprain of the wrist. After remaining for some time in the house she was operated upon. Dr. Barton placed her arm upon a table, and, with an instrument which cut at both ends, made an incision, and by scraping and cutting removed a long piece of bone full of small holes like a honey-comb, and containing a large cavity in its center. He told the students present at the operation that he did not expect new bone to form, but that a gristle-like substance would take its place.

[1] Reprint from Transactions of the College of Physicians and Surgeons.

He was assisted by the Resident Physicians, Drs. James A. Washington and George Fox. She remained in the hospital until the autumn, and in a few months after her discharge regained to a great extent the use of her hand.

Her name and age have been found in the record of the hospital; the date of her admission being July 16, 1828, and her discharge, November 15, of the same year.

In studying the condition of the parts as they now present themselves, it will be of interest to note the main causes which have brought about the usefulness of the hand, the changes in position and function of the parts not involved in former disease incident to the removal of so important a structure as the entire or almost entire diaphysis of the radius, and the influence these alterations have had upon the growth and development of the bones and soft parts. The usefulness of the hand would seem to depend not only upon the preservation of the upper and lower epiphyses of the radius, the former through probable extension of the periosteum giving attachment to the biceps muscle and the latter to the long supinator, but also upon the strong healthy character assumed by the skin investing the lower end of the ulna. This skin cap is the principal antagonist to the action of the muscles of the forearm, and if from constant pressure against the bone it had become thin

and tender, as it very likely would have done without the intervention of a bursal sac, every movement of these muscles would have caused pain, and the hand would have become almost useless.

The skin has, of course, yielded to a considerable extent, and the hand has, therefore, been gradually dragged up the forearm. The thumb, from the loss of the origin of its long flexor, has become feeble and disused. The ulna has been made an active agent in support, and having lost its styloid process, presnmably by absorption, the lower end has assumed a smooth knob-like appearance.

The growth of the sound bones has been comparatively little arrested, this being evidence that active work was performed by the hand during the growing years which succeeded the operation. The humeri are the same length. The right ulna is one and a quarter inches shorter than the left. Part of this difference must be accounted for, however, by the absence of the styloid process, and part may also be due to a somewhat deficient development of the whole lower epiphysis in length —though not in breadth—as it is full and broad.

From measurements made of the ulna in connection with this case, the average length of the bone in females at the age of ten years is about seven and a half inches. In this case it is ten and a quarter inches upon the left side and nine upon the right. The difference in the circumference in the middle of the arms is three-quarters of an inch; in the middle of the fore-arms, two inches; and of the hands, one inch; all in favor of the left or sound side.

The hand is set in an everted position well up the forearm, the tip of the middle finger being four inches and a quarter nearer the elbow than upon the left side. Although thus distorted, and so loosely attached that it can be brought at right angles with the line of the ulna, it is remarkably strong, and with it she is capable of executing almost any movement.

Articulated with the carpus is felt the lower end of the radius. In its proper place the head of the radius may also be felt, continuous with which and extending down the forearm nearly to the hand is a prolongation of fibro-cartilage occupying the site of the excised bone.

NOTES AND ITEMS.

INFANT FOODS.—PROF. ALBERT LEEDS, PH. D., read before the Philadelphia College of Physicians and Surgeons, May 2d, 1883, an exceedingly interesting and valuable paper on the subject of Infant Foods, of which the following is his conclusion:

1st. Cow's is in no sense a substitute for woman's milk.

2nd. Attenuation with water alone is inadequate, and chemical metamorphosis, or, mechanically, the addition of some inert attenuant is required, in order to permit of the ready digestibility of cow's milk by infants.

3d. The utility of manufactured infant's food is to act as such attenuants, and as such they take the place of the simple barley and oat-meal water, the sugar, cream, baked cracker, arrowroot, etc., etc., used in former times.

4th. The results of both chemical and physiological analysis are opposed to any but a sparing use of preparations containing a large percentage of starch.

5th. It is eminently probable that, besides acting as attenuants, the matters extracted in the preparation of barley and oat-meal water, and still more the solid albuminoid extractives obtained at ordinary temperatures (whereby coagulation is prevented), by Liebig's process, have a great independent value of their own. For this reason, instead of employing starch, gum, gelatine, sugar, etc., the use of a natural cereal extractive, containing saccharine and gummy matters and soluble albuminoids as well, such as our great and inspired teacher, Liebig, himself advocated, is in accordance with the developments of science since his time.

6th. The use of food made up of equal parts of milk, cream, lime-water, and weak arrowroot water, as practiced for years by the late Dr. J. Forsyth Meigs, and recently advocated by his son, Dr. Arthur V. Meigs, is sustained by theory, analysis, and practice. It provides for the increase of fat to an amount

comparable to that contained in human milk. It adds alkali to permanent reaction, and to convert caseine into soluble albuminates. It adds a little bland attenuant. And if, in addition, the amount of milk-sugar were raised, and instead of arrow-root water, barley or oatmeal water were substituted, as the case demanded, it would approach, it appears to me, still more nearly to the conditions required.

7th. The perfect solution of the present problem is to be found in the modification of cow's milk by chemical processes, so as to make it physiologically equivalent to human milk. The nature of these processes, and the results to be obtained, are at present so nearly wrought out, that there is good ground for believing that such a solution of this problem is not far distant in the future.

THE MISSOURI BOARD OF HEALTH was duly organized at Jefferson City, July 13, by the election of Dr. E. H. Gregory, of St. Louis, as president, and Dr. J. C. Hearne, of Hannibal, as secretary. The annual meetings of the Board will be held in Jefferson City on the second Tuesday in January in each year, and regular meetings will be held (in such places as the Board may determine) on the second Tuesdays of April, July and October.

Examinations of candidates and physicians under the act to regulate the practice of medicine and surgery will be held only at such regular meetings of the Board of Health, unless ordered by the Board by a vote of two-thirds of all the members.

At a meeting held in St. Louis, Aug. 1, the Board adopted the Illinois minimum requirements for medical colleges.

The secretary was instructed to prepare a synopsis of the law regulating the practice of medicine and surgery, together with mode of procedure, rulings, interpretations and decisions on the same or such of them as may be of general interest, and have printed a sufficient number for general distribution.

A circular will also be issued by the Board giving the opinion of the Attorney-General that all physicians who have not practiced five years in this state prior to the passage of the act, and having diplomas, shall bring or send them before the Board for examinatien. All physicians who have no

diplomas, and were not in practice in the state prior to the passage of the act, shall come before the Board for personal examination and certificate.

It was resolved, that in order to expedite the business of the Board any one member of the Board can verify a diploma, and such verification accompanying the proper affidavits is sufficient to warrant the secretary to issue a certificate. The Board issued one hundred and twenty-five certificates for the practice of medicine in the state. Five applicants were examined, four of whom were rejected.

A vacancy has been created in the Board of Health by the sudden death of Dr. P. D. Yost, of St. Louis.

THE MEDICAL DEPARTMENT OF SHAW UNIVERSITY.—Shaw University is an institution founded eighteen years ago at Raleigh, N. C., for the colored men of the South. Rev. H. M. Tupper was its founder, and still is its president, and to his indomitable courage, delicate tact and persistent faithful effort is due the eminent success which the institution has attained in the face of what would have seemed to be insurmountable obstacles. The institution now holds property valued at more than $100,000. The students have labored with their hands while they have carried on their studies, and many of them have supported themselves by their work. The bricks which form the walls of the five university buildings were all made by the students, and they have made and sold for the benefit of the institution over three million more. They have also manufactured a large part of the furniture in use. Last year a medical department was established. The state gave the ground, and friends have supplied the funds necessary for the erection of two large brick buildings for the new department, one of which is a dormitory with accommodations for sixty students, while the other contains lecture rooms, dissecting rooms, etc. The fees for a five months' course of lectures are sixty dollars. A graded three years' course is recommended, but two will be accepted preparatory to graduation.

LIBRARY OF THE SURGEON-GENERAL'S OFFICE.—In reply to an inquiry by the editor of the *Medical News*, Dr. John S. Billings, Librarian of the Surgeon-General's Office, says he is

authorized by the Surgeon-General to say that books are loaned from this library to other libraries which undertake to be responsible for them and have suitable buildings for their safe preservation. Books which can be readily replaced, if lost, are also loaned to individuals, upon their making a deposit with the Librarian of funds sufficient to make good any damage or loss. Books must be transmitted each way by express and not by mail, and the expressage each way must be paid by the borrower. The funds deposited with the Librarian are, of course, returned when the books are received back in good condition.

MEDICAL PUBLICATION DISPUTE.—A preliminary injunction has been granted by Judge Mitchell, of Philadelphia, restraining Samuel M. Miller, M. D., from continuing the publication of a book entitled "An Epitome of Medicine, Surgery and Obstetrics, including Nervous Diseases and the Diseases of Women and Children," by Alfred Stillé, M. D., D. Hayes Agnew, M. D., and R. A. F. Penrose, M. D., on the ground that the publication is unauthorized, and consists of an incomplete and careless rehash of the oral lectures which they have been delivering to the students at the University, to which the publisher has contributed nothing but the summarization and the errors. They further allege that the publication is calculated to injure them both professionally and financially.—*New York Med. Jour.*, Aug. 18, 1883.

THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF COLORADO promises to maintain the higher standard of medical education with four annual courses of nine months each. The school is open free of cost to all qualified persons, without restriction as to race, sex or place of residence. Qualification consists in the presentation of a degree in letters or science, or the passing of an equivalent preliminary examination.

THE POLYCLINIC, published by P. Blakiston, Son & Co., is the successor of the *Medical Register*, and will include the principal features of that journal in its book department. The new journal is conducted by the faculty of the Philadelphia Polyclinic and College for Graduates of Medicine.

ST. LOUIS
COURIER OF MEDICINE.

VOL. X. OCTOBER, 1883. NO. 4.

ORIGINAL ARTICLES.

ON THE TREATMENT OF CERTAIN FORMS OF SUPPURATIVE INFLAMMATION OF THE MIDDLE EAR.

BY H. N. SPENCER, A. M., M. D.

[*Read before the Medico-Chirurgical Society, July 10, 1883.*]

A SUPPURATIVE inflammation of the middle ear is most likely to be a very complicated process, and requires that the surgeon possess a great variety of resources, if he would be successful in handling this exceedingly harmful and grave affection.

No one line of treatment can be prescribed which will meet every indication — of simple rupture of the membrana tympani, of partial or entire loss of this membrane, of loss by erosion of one or more of the ossicula auditus, of caries of the inner bony wall of the cavity to which belong the fenestræ, with their pertainments, and the canal of Fallopius, of encroachment upon the soft or bony tissues of the tegmen tympani, or of mastoid cell disease; to say nothing of the varieties in the ulcerative process, characterized by defect of action, by excess of action, or

peculiarity of action. Failure to afford relief will often be founded upon failure to recognize the true pathological condition involved.

In no affection is the conventional treatment—by instillation of drops or insufflation of powders—more to be deprecated. It is not my purpose, in the brief pages of a single article, to map out the treatment which I should regard as indicated in every phase of this interesting process. I shall confine myself to the exposed suppurative inflammations of the tympanum, excluding bony involvement. With the mysterious veil of the drum-head removed, the drum-cavity is brought within the domain of familiar surgery, and becomes liable to those general principles in treatment which experience has made surgical axioms of. We have to treat the cavity presenting this condition of exposure as an open wound, with recesses and pockets into which the wound-secretions escape and, undergoing fermentation, present all the requirements for a self-perpetuating ulcerative process.

I shall not enter into the question, at this point, of the advisability or inadvisability of treating such surfaces with the syringe or the douche—except to express a conviction that we have to look to these procedures for the cause, in many instances, of exposed ulceration. It is easy to appreciate how the flabby, watery tissue, with an inertia of circulation, might be induced and be made to endure by ill-advised water-dressing.

The inducing cause of the exposed ulcerations of the tympanum is, of course, to be found in the acute suppurative inflammations to which this cavity is liable. Their frequency of occurrence is out of all proportion to the frequency with which chronic suppuration follows upon other acute inflammations. The reasons for this are obvious. The inaccessibility and anatomical peculiarities of the middle ear prevent our meeting the indications which are essential to the healing by first intention. Unable to secure apposition of the edges when there has been a solu-

tion of continuity in the membrana tympani, or the exclusion of air from the affected surface, the establishment of a chronic process is inevitable. The breaking down of the membrana tympani follows with almost the same undeviating regularity—being left to itself, or assisted by ill-advised treatment. I need not go further into the *etiology* of exposed ulcerations.

I shall merely outline the *pathological* differences which are met with in the class of suppurations to which I am asking your attention. I have used the terms ulceration and suppuration synonymously. The tendency to localization of the inflammatory process is my warrant for use of the former. It is rare, in chronic purulent inflammation of the middle ear, that the swelling, or the hyperplasia, occupies the entire cavity.

The exposed ulcerations may be said to consist of four varieties. These are well expressed by Syme's classification, which divides ulcerations into: 1—the healing or healthy; 2—those which do not heal from defect of action; 3—those which do not heal from excess of action; and, 4—those which do not heal from peculiarity of action.

The *first* variety, when the pus has been removed, is characterized by a bright red and swollen mucous membrane, denuded of its epithelium. There is a limited infiltration of the connective tissue stroma, and the edges of the ulceration are not indurated.

In the *second* variety, the surface of the mucosa is less red, and wears a flaccid appearance. The secretion is watery, and abundant or scanty as there is more or less activity in the degenerative process. The exciting causes which influence this activity determine the amount of induration.

To the *third* class belong the more highly vascularized processes.

Those ulcerations which do not heal from *peculiarity* of action may be said to have this abnormity depending upon some constitutional disease.

The forms here enumerated represent the vast majority of all the so-called chronic suppurative inflammations of the middle ear. Schwartze[1] states that the periosteal connective tissue is the most rarely affected of all.

The *treatment* of this class of ulcerations which has been the most successful, in my experience, is that which would be applied in the general practice of surgery to similar ulcerative conditions—with that adaptability to location, of course, which modifies all surgical treatment. The ulcerative surface is best prepared for treatment by gently absorbing the wound-secretions, using for this purpose the cotton-holder and absorbent cotton. I have found from an extensive experience — exceeding six thousand cases in private practice, with the relative proportion of chronic suppurations to this whole number which usually obtains—that this is all that will be required in the vast majority of instances. I refer to this number of cases seen in the private office as offering better opportunity for observation than the attendance upon the public clinic affords. There are others who have had a more extensive experience than this—but certainly here is enough to warrant the crystallization into conviction of any conclusions which have been arrived at. There are exceptional instances, where it becomes necessary to resort to other means. A case may serve to illustrate, at the same time that it will show the inutility of much of the syringing that is done:

Mr. B. applied for treatment, presenting a chronic suppuration on the left side of twenty years' standing, a sequel to scarlet-fever. The drum-head was found to be entirely gone, including the long process of the malleus. The inner wall of the cavity, in the lower and anterior portion of it and in the upper portion anterior to the malleo-incudal articulation, was healed over. There was a drop of creamy

[1] The Pathological Anatomy of the Ear. By H. Schwartze, M. D., Prof., etc. Translated by J. Orne Green, A. M., M. D., Boston: Houghton, Osgood & Co., 1878.

pus posterior to the umbo, and two or three bright red points of ulceration near the juncture of the inner with the posterior wall. The ear had been under the care of a physician in another city, and for a year had received daily ablutions—frequently being syringed twice during the day.

I attempted to remove the matter—of a very offensive character—with cotton, and found the chief source of it under the tegmen tympani. Effort was made to reach this by bending the tuft of cotton at a right angle with the holder, and passing it over the ridge of bone through the opening posterior to the umbo, in the direction of the tympanic roof. This was repeated until the cotton came away clean. There persisted, however, such a peculiarly disagreeable odor that I determined to employ other means of cleansing, and resorted to the middle ear syringe, injecting into the fossa a solution of borax. This brought away quite a large blackened mass, undoubtedly of degenerated and inspissated pus, from stagnation of the purulent mass in a recess which until now had not been reached—though patient and physician had supposed that the ear was being cleansed after the most orthodox manner. There are concealed ulcerations, whether located as in the case just referred to, or hidden by a drum-head which has only been partially destroyed, that will require the use of the syringe.

Another indication may be said to exist in cases of profuse discharge. Here, however, it would be well for the conscientious surgeon sometimes to propound to himself the question whether he is led to this procedure by motives which concern the welfare of the patient, or by a selfish motive of time and labor saving. The age and temperament of the patient, again, will have a determining influence.

In brief, the decision of this question of the method of cleansing should exercise the best judgment of the attendant in each particular case. It is my practice to com-

mence the examination of the ear in this class of diseases *always* with cotton-cleansing, and to conduct it throughout by this method, if practicable. I think it will not be questioned that in those cases where this mode suffices, the healing takes place very much more rapidly and the result is more satisfactory. The dry is certainly more conservative of the epithelial pellicle than the water treatment.

We come now to consider the application of remedial agents and agencies. In the healing or healthy ulcers I am disposed to rank boracic acid very high. I have discontinued a use of it which I formerly made, that of filling the canal with the powder, finding it altogether unnecessary, to say nothing of the embarrassment to which it frequently gives rise. I shall have occasion in another place to refer to Bezold's method of using it, and may possibly be able to explain the *modus operandi* of its favorable operation in another condition of ulceration than that to which we now make reference. It has been sufficient in my experience to merely cover over the affected surface, projecting the powder gently by means of any of the powder blowers in use. The promptness with which this application affords relief in well selected cases, even of very long standing, is often surprising. I have seen in many instances a single insufflation of this powder procure the entire and permanent stoppage of a discharge which had been present for weeks. Others have no doubt had this same experience. Dr. Burnett[1] relates such a case recently. Drs. Sexton and Burnett are very high authority for the use of a calendulated boracic acid (the boracic acid tinctured with calendula officinalis), and also for a compound preparation of boracic acid with resorcin. My own experience with these preparations has not been sufficient to enable me to determine if they possess advantages over the simple powder.

[1] The Treatment of Chronic Purulent Inflammation of the Ear. By Chas. H. Burnett, A. M., M. D. *The Polyclinic*, Phil., July 15, 1883.

If there is a tendency to hyperplasia, the nitrate of silver becomes a most valuable remedial agent; and I may add, in passing, that otology will never outgrow its use. Iodoform has its office in recent exposed ulcerations in the same stage and condition of inflammation as regulated its use in general surgery.

Without following the order which I have indicated in the classification given of ulcerations of the ear, I will refer next to the treatment of polypi, a complication not unfrequently met with. They vary in size, as they do in location of attachment and in histological structure, all of which considerations will have a due weight in determining the course to be pursued with them. As would be supposed, the mucous polypi are the most common, and are the product of a hyperplasia of the mucous membrane. If there are reasons opposed to the extirpation of these neoplasms, such as size or location and extent of attachment, or subjective peculiarities of any kind, I commonly apply the alcohol treatment. The effect of such an application will be seen in the following case: Freddie E., age 12 years, has had discharge from the left ear for three years; has been treated most of the time with syringing and the instillation of astringent drops. At the hands of one physician employed by the family this treatment was persisted in for six months without abating the discharge. When not under the care of a physician, the syringe has been used at home to insure cleanliness. I found on examination a polypus fitting closely in the angle of the posterior wall with the inner wall of the cavity, concealing completely any opening in the drum-head. Its presenting surface extended from the upper margin of the bony meatus, posterior to the umbo, to a point near the floor, and laterally reached over to a point near the line of the manubrium mallei. Being unable to lift it at any point from its bed, and bleeding to the touch, I decided to treat it with absolute alcohol. After absorbing the secretions by means of cotton, the alcohol, slightly warmed, was poured

into the ear, and allowed to remain for a minute. This was repeated, being employed once each day for five days, when the growth was found on the sixth day sufficiently shrunken so that it was removed without difficulty by means of the curette. The surface was carefully dried, and dusted over with boracic acid. There was no discharge subsequently.

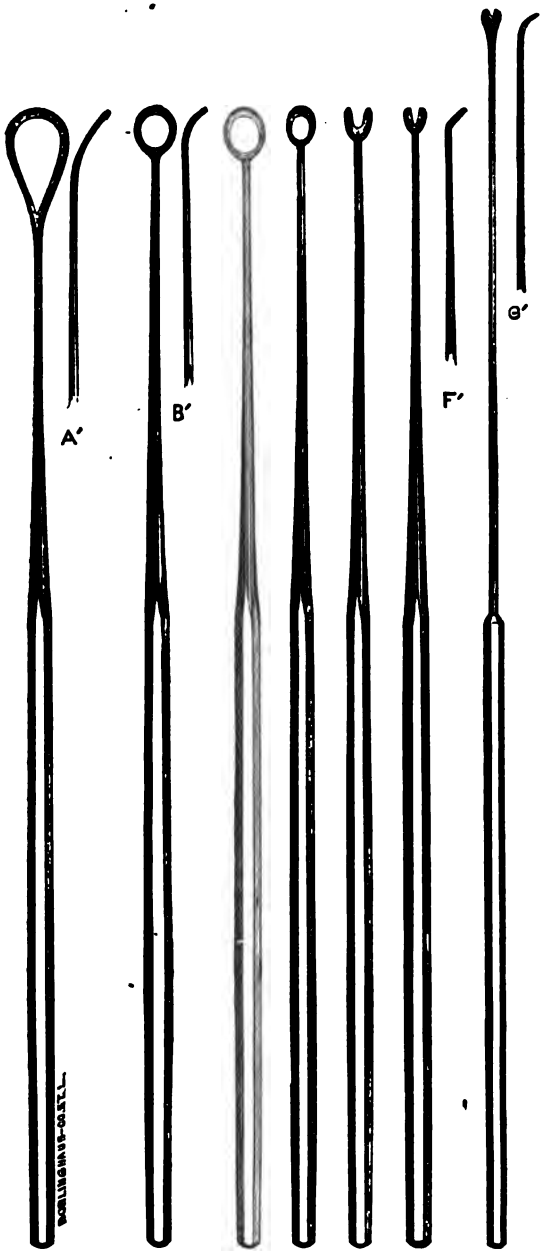
It may be added: In the engorged and swollen tissues which sometimes complicate chronic suppurations, from one cause or another, alcohol will often procure a prompt relief. I have found no special advantage in adding boracic acid to the alcohol, as recommended by Löwenberg and others.

For the instrumental treatment of these growths there exists a variety of devices. Blake's modification of Wilde's snare is probably the one most generally in use. Sexton has improved the handle of this instrument.

I have used for sometime, in operating upon smaller growths, the instruments which I submit for your inspection. (See cut.)

Dr. Roosa has suggested recently (*N. Y. Medical Record*) a similar modification to this of Buck's curette. The advantage of the open blades (E and F) I think will be seen readily. A represents a nasal curette. I shall not dwell longer upon this portion of my subject.

There is a very interesting field for study and experiment, it appears to me, presented in that variety of suppuration of the tympanum which is characterized by a relaxed tissue and "defect of action." The treatment of this variety of ulcers in other locations, by means of the bandage, suggested to me long ago that compression would exert a favorable influence upon ear ulcerations, if it could be applied. I have practised this method of treatment upon quite a large number of cases, and in some instances with the most gratifying results. In the early part of the last winter I had the pleasure of presenting a patient be-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fore the membership of this society, in order to illustrate the practice and the result of this method applied in aural surgery. I will recall for you the history of that case:

A carpenter, residing in the northern portion of the city, suffering with great pain in the right ear, applied to a neighboring druggist for relief. The enterprising pharmacist, for a small consideration, gave him a preparation of "tooth-ache drops," which he assured him would procure an immediate cessation of pain. This application poured into the ear, according to instructions, instead of quieting caused the sufferer to become almost wild with a pain so intense that what he had experienced before seemed as nothing. His distress thus aggravated lasted for an hour, when the "ear broke," and the discharge brought him a measurable relief. A physician to whom he next applied directed the ear to be syringed morning and evening with milk fresh from the cow. He continued this treatment for two weeks, when he substituted for the milk a tea which was highly recommended by a "good old woman." This decoction he then employed three times each day until he came under my care, about five weeks from the date of his injury. The discharge had been continuous, watery, and, so far as he had been able to discover, without odor. The drum-head was found to be largely destroyed posterior to the handle of the malleus. The membrane that remained was white, and the exposed tissues of the cavity pallid. There was some redness of the inner portion of the posterior wall of the meatus, but not the redness of an active process of inflammation. The general appearance was that of maceration of tissue and inertia of circulation through the parts. The discharge, quite profuse, was of low grade and watery constituency. Air passed readily through the Eustachian tube. The ear was cleansed by absorbing the secretion, and I placed a compress of absorbent cotton over the affected surface, using an instrument for this purpose represented on page 297, and indi-

cated by the letter G.[1] The compress was removed and a fresh one applied morning and afternoon of each day at first. This treatment caused no pain whatever, the patient rather expressing himself as experiencing a sensation of relief. The discharge decreased rapidly, and the parts assumed a healthier appearance. After ten days there was no discharge. I then omitted the compresses, but kept the meatus closed with a pledget of cotton. The case was dismissed on the seventeenth day from the time of entering my office, no other treatment having been employed than that which I have outlined. This patient came back to me, at my request, in about two months, and I found the destroyed portion of the drum-head had been reproduced, and there was scarcely a perceptible impairment of the hearing.

This method of treatment is only applicable, of course, in that condition of tissue which requires mechanical support, and necessarily where the ulcerative surface is exposed that the compress may be adapted. I have found it serviceable after operating for exuberant granulations, and have applied it to a surface which I had first treated with the cautery or astringent. At this point I am led to offer a promised explanation, as it appears to me, of the action of Bezold's method of packing the auditory canal with boracic acid. It is the substitution of a bland, non-irritating powder for the absorbent cotton as a compress; and it is in this class of ulcerations, where COMPRESSION seems to be the indication, that this method has appeared to do the most good in my experience. In addition to its being perfectly smooth and unirritating, this powder may be said to possess other properties of nicer adaptation,

[1] This instrument is made of alloyed silver, having a slightly yielding shank, and the blade curved upon itself with perfectly smooth and rounded edge. The bifurcated blade increases the utility of the instrument in placing the compress, and makes it serve also the purpose of a tractor. The opposing point on the meatus wall serves as the fulcrum of the leverage, and the compress is sustained in position by packing the canal with cotton.

easier application, and (if you please) antisepsis. There are disadvantages associated with its use, however, which more than outweigh the recommendations enumerated. It retains the secretions, and is not susceptible of easy removal. In most instances its use in this way will necessitate also the employment of the syringe. I think that boracic acid may be used with advantage in this variety of ulceration, especially if there is a tendency to granulation; and I am inclined still to ascribe its good results, *merely covering the surface*, to its mechanical operation. Dr. Burnett's case, to which reference has been made above, and similar cases, might be used to illustrate this. The drying and contraction of the powder about a small growth every part of which has been covered, including the base, influences the circulation to an extent that the growth disappears and the suppuration ceases.

Before leaving this division of my subject I wish to state, in regard to absorbent cotton as a compress, that I have only desired to submit what has been my experience with a new agency in the treatment of a peculiar phase of suppurative otitis, and to ask for it a place on the list of our aural armamentarium.

Finally, those ulcerations of the middle ear which do not heal on account of some constitutional disease require, of course, that this interference be dealt with. The importance of constitutional treatment should not be overlooked in other forms of suppurative inflammation of the ear, but here it takes a more important and governing place, without which all local treatment will prove utterly inefficacious. The topical treatment will differ in no respect from that which would obtain under other undisturbed conditions.

ACUTE GASTRITIS.

BY J. M. ALLEN, M. D., LIBERTY, MO.

[*Read before the Kansas City District Medical Society, September, 1882.*]

IT has been my fortune during the last fifteen years to treat twenty-eight cases of gastritis, a report of which I propose to make to the society to-day, believing that because of the rarity of this disease, and the great want of clinical facts in our medical literature on this subject, it will be of interest to you. I will give you the characteristic symptoms from the beginning to the close of a typical case, with such treatment as seemed to me indicated at the beginning of the case, reserving the general treatment to be given at the close. As the cause or causes seemed to be different, I will report the cases under the different heads of what seemed to me to be the cause, leaving you to decide as to the correctness of my opinion. I will divide the disease into stages or periods of ten days each, for the first twenty days, the last stage to include the period after twenty days until recovery or death.

CLINICAL HISTORY.—*First Stage.*—The attack begins with a feeling of fullness in the stomach, a sensation of heat or burning, followed by the vomiting of a clear, watery fluid, of acid reaction, mixed with more or less mucus, occasionally streaked with blood. If of the catarrhal type, involving the superficial structure, the amount of mucus discharged is large; if of the severer type, involving the sub-epithelial and other structures, the amount of mucus is small and in shreds. The vomiting is persistent, and partakes of the nature of a tenesmus. The stomach will not retain anything, not even water. Pressure over the organ elicits but little pain when peritonitis is absent, but usually produces nausea. The facial expression is one of great suffering. The mind is always perfectly clear. Sleep is disturbed with unpleasant dreams. The pupil is unaffected. The tongue is normal

in size, and has a thin white coating on it, with slight redness on its borders. Respiration normal. Pulse from 100 to 110 and full. Temperature from 102° to 104° F. Skin hot and dry. The bowels remained normal, except in a few cases that were associated with enteritis. The fecal matter in only a few cases showed the absence of bile, and then for only a few days, although, as will be seen, there was duodenitis in a few cases. The action of the kidneys was normal in quantity, acid reaction, and in a few cases lithic deposit.

Second Stage.—About this time, if the inflammation is going to terminate in resolution, the symptoms gradually subside, and the patient begins convalescence. If not, the patient continues to vomit, not so frequently, but when it does occur the matter contains the products of inflammation, vitiated secretion, regurgitated bile mixed with the water drunk. The color of the matter is a bluish indigo. We now begin to find pus mixed with the matter vomited. In a few of my cases there was as much as half a teaspoonful of pus vomited at a time, supposed to be the result of a small abscess formed in the stomach. This occurred at the latter part of this stage. The feeling of fullness in the stomach continues, but is much lessened. The heat and burning are absent, except when the organ contains the products of inflammation, etc., which usually occurs every two to four hours, and causes emesis, after which the patient is tolerably comfortable. In my first cases, during this stage, I committed the error of giving my patients small quantities of milk, or milk and lime water, thin broths, barley water, soft-boiled eggs, etc., which they would retain for a time and then vomit them up undigested. In every case the patient was made worse by this effort to feed, and it had to be discontinued. Pain on pressure is less than in the first stage. The facial expression does not indicate as much distress. Mind clear. Sleep refreshing. The pupil normal until the latter part of this stage, when it becomes

more dilated. The pulse during the first five days of this stage is lessened in frequency, but towards the latter part it increases from 110 to 120, with increased feebleness. The temperature is 100° to 101° F. Bowels usually constipated, probably the result of treatment. During the latter part of this stage, in all my cases which extended over fifteen days, the patient complained of difficult deglutition, heat and burning beneath the sternum. This was followed by an inflammation of an erythematous character to be seen in the pharynx, nares and mouth, with a desire to hawk and clear the throat. In a few cases small, whitish ulcers, like aphthæ, appeared in the mouth. The tongue in the latter part of this stage lessens in size and papillæ appear on its edges. In only two cases did it become dry or spear-shaped, and then only during sleep. About this time difficulty of breathing occurs, usually paroxysmal. The extremities are inclined to be cold, especially the feet, which must be kept warm by artificial heat. The skin is cold, and occasionally perspiration appears. The secretion of the kidney, which has been normal in quantity up to this time, now shows a tendency to deficient action, and in one case complete suppression and death occurred. The color of the secretion in all the cases was changed to a dark red.

Third Stage.—In this stage there is no material change in the symptoms as far as the stomach is concerned. Vomiting continues every two, three or four hours, or as often as there is any accumulation in the stomach. Thirst for ice and cold water is now absent. The patient sometimes relishes lukewarm water. Emaciation is marked, and in the latter stage is very great, but not so great as we often see in protracted cases of typhoid fever. In proportion to the increase of emaciation is the frequency and feebleness of heart action, the pulse ranging from 120 to 160, and the heart's rhythm being entirely lost. The temperature remains about 100° or 101° F. until a few days before death, in the cases which terminate fatally, when

it rises to 103° or 105° F., a sure harbinger of approaching death. Dyspnea is usually paroxysmal. There is hypostatic congestion of lungs. The skin feels cold to the touch, especially when exposed to the air. The tongue remains moist, with a slight white coating and red borders. In only two cases did the patient complain of the tongue getting dry, then only for a few days. It was always reduced in size, but was never spear-shaped. In the latter part of this stage the liver and spleen usually enlarge, the result of enfeebled heart action. While there is slight jaundice in some cases, it is never prominent. The kidneys in all my cases except two had a tendency to suppression, and the urine was loaded with effete matter, lithates, etc. Anemia of the nervous centers is now manifested, in all the cases which last over twenty days, associated with more or less tendency to passive congestion of the base of the brain. The sclerotic is of pearly whiteness; the pupils are largely dilated. Five of the cases had repeated tonic contractions of the flexor muscles, especially of the arm. One of the cases had convulsions. In eight of the cases there was impaired vision; three of these were totally blind, two of them died and one recovered, but remained blind until health was restored. The mind remained clear in all the cases to a point where the brain suffered for the want of nutrition, after which there was more or less delirium, but never great. Death in each fatal case was by asthenia, accompanied by passive congestion of the base of the brain, followed by coma, except two, who died after the stomach had become retentive, with every evidence that it was performing its function. Both of these were taking enough food by the mouth to sustain them, as well as per anum in large quantities. One of them died of suppression of urine, with the symptoms of uremic poisoning; the other of cerebral embolism.

The factors, as far as I am able to judge, which played a part as causative are as follows: (1.) Mitral and aortic insufficiency. (2.) Rheumatism. (3.) Over repletion.

(4.) Malaria. (5.) Reflex irritation. These causes were generally associated with other complications, often with chronic duodenitis and indigestion.

I have selected the following cases as being typical cases of this disease:

CASE No. 1—*Over Repletion* the cause. Master A., æt. 6. Health had always been good, with the exception of attacks of croup. Family history good. Sept. 3rd, 1873, had been perfectly well during the day; had indulged in fruit, and late in the evening ate several figs. About 10 P. M. was attacked with vomiting and purging, which was supposed to be cholera morbus. After emptying his stomach by an emetic of warm water, he was given tr. opii, m. ij, plumbi acet. gr. ss., every two hours until the vomiting ceased, which occurred after the second dose. The medicine was ordered continued at intervals of four hours until three doses were given. He rested so well after 4 A. M. that nothing more was given. At breakfast he refused to eat, and only took two or three teaspoonfuls of warm tea. He drank water occasionally, but his thirst was not great. He had no fever until 11 A. M., when he had a slight chill, followed by high fever, intense thirst and incessant vomiting. I diagnosed gastritis, and directed that nothing be given him by the mouth but iced water and crushed ice, which was given ad libitum. The pulse, 110; temperature, 104° F. Ordered tr. opii m. iv, starch water ʒ i, to be given by the rectum every three or four or five hours, until the effects of the opium were manifest, which was maintained by increasing and decreasing the amount as the case required. On the next day I substituted water for the starch water, and added quiniæ sulph. gr. ij to each injection. Two days later I substituted beef tea for the water, as much as the bowels would retain, and reduced the quiniæ sulph. to gr. j. On the fifteenth day the symptoms of exhaustion were extreme, and we added a small quantity of whiskey to the enema, as well as bathed the body every few hours in

alcohol. The pulse was 140, and scarcely perceptible at the wrist. Temperature, 101° F. Kidneys acting well, and rectum retentive. The pupil largely dilated. The sclerotics perfectly white. Slight tremors and contractions of the flexor muscles. Symptoms of passive congestion of the base of the brain, and marked tendency to coma. A large blister was applied to the nape of the neck; after it drew, the patient seemed better for a few hours, but relapsed into partial coma. A large blister, 6x7, was applied over the upper portion of the abdomen. After this drew, the child brightened up, and from this time on continued to improve. When the partial coma passed off, we recognized that his vision was impaired. He was unable to recognize any one, and we are not sure he could distinguish light from darkness. Fifteen days later he was placed under the charge of Prof. Chas. E. Michel, of Missouri Medical College, St. Louis, Mo. He diagnosed "ischemia retinæ." Under his treatment, ten days afterwards, vision began to return, much narrowed in circumference. His vision has improved until now and is perfect, except in circumference. His health is now perfectly good. This patient never vomited much mucus the first ten days, showing that the sub-epithelial and possibly other structures were involved. We recognized pus first about the tenth or twelfth day.

Case No. 2—*Chronic Duodenitis* the cause. Mrs. G., æt. 37. Family history good. Health had always been good, except indigestion, which in my opinion was the result of chronic duodenitis. Jan. 1st, 1881, I was called to see her. She had been suffering for several days with what she supposed to be a severe cold. The day before she had taken to her bed, and had taken a purgative. She now complained of heat and burning in the stomach, and had vomited several times in the preceding twenty-four hours. I did not see the matter vomited. Her pulse, 97; temperature, 103° F.; respiration, 27. On examination, I found slight pneumonia in lower portion of the right

lung. It was near her monthly period, and she explained her nausea in this way. I thought it probable, but concluded to be cautious. Ordered sinapism to the right chest. Gave by stomach, morphiæ sulph. gr. ⅛, bismuthi subnitrat. grs. v, every three or four hours. Ordered no food to be taken, but ice and iced water ad libitum. Ordered quiniæ sulph. gr. vii, and aquæ ʒij, injected into the rectum every six hours. On the next day I found gastritis fully established, after which nothing was taken by the mouth but ice and iced water. She was kept under the influence of morphine by hypodermic injections. All the medicines and nutriment were given by the rectum. The skin was frequently rubbed with lard. In the latter stage she was sponged frequently and freely with alcohol. Hot alcohol was applied by cloths to the abdomen and inside the thighs. This patient retained her strength remarkably until about the twentieth day. From this time on she lost flesh and strength rapidly, and by the twenty-sixth day anemia of the brain and nervous system appeared, attended with tonic contraction of the flexor muscles of the arms and occasionally slight tremors. Pulse, 140 and very feeble; temperature, 102° F. Respiration difficult. Pupil dilated. Vision impaired. Muscæ volitantes floating before the eyes. Indications of passive congestion of the brain, considerable delirium, legs and arms could not be kept warm. Hopeless as the prospects were, we continued the treatment. On the first appearance of the passive congestion of the brain I applied a blister to the nape of the neck, but do not think it did any good. About the thirty-second day the symptoms began to improve. The nervous system was the first to manifest the change, by the intellect getting brighter and the contractions ceasing. Then the stomach, vomiting ceasing; and forty-eight hours afterwards we began to give weak animal broths. She continued to improve, and is to-day in excellent health so far as digestion and assimilation are concerned, but not so in her nervous system. She never

regained her vision fully, nor can she yet walk without assistance, although her limbs are large, nor does she talk distinctly. Her intellect is not what it once was. She was seen during the severity of the attack by Dr. W. A. Morton, of this city, and during a part of her convalescence she was under the charge of Dr. S. S. Ritchie, of this place; and lately has been seen by Dr. C. H. Hughes, of St. Louis, Mo. The places of residence of the cases recorded are as free from malaria as any place in the West.

Case No. 3—*Malaria* the cause. Miss R., æt, 36. Not stout, rather spare frame. Health good, except indigestion, dependent on chronic duodenitis. Lived in a very malarious district. Was called to see the family in September, 1876. Had been sick two days. Had taken purgative pills and quinine. The latter produced nausea with Miss R., but she did not vomit. I prescribed a febrifuge mixture—"liq. ammoniæ acetatis" two parts, spir. nitrosi dulcis one part, and ordered a dessertspoonful every two or three hours during fever. Ordered quiniæ, gr. v., every three hours, beginning at midnight, until twenty grains had been taken by each patient. Next day Miss R. had positive symptoms of gastritis—the other patient much better. Her pulse, 110; temperature, 104° F. Bowels regular. Vomited incessantly, ejecting a watery fluid of acid reaction. On the tenth day pus was discerned in the matter vomited. On the sixteenth day she was decidedly better and had only vomited twice. The next twenty-four hours she did not vomit at all. We gave her small quantities of broth by the mouth every two or three hours, which was retained, and as far as I know digested. The amount of nutrition was increased from day to day with no bad effects. On the twentieth day there was partial suppression of urine; on the twenty-first, complete suppression; and she died of uremic poison on the twenty-fourth day. I think it fair to presume that if the action of the kidneys had not been interfered with she would have recovered.

CASE No. 4—*Malaria* the cause. Mrs. B., æt. 43. Health moderately good, never stout. Family history good, but not robust. I first saw her July 20, 1878. Found that she had been complaining for several days. The day previous she had a chill, followed by fever, which did not remit. Pulse, 110; temperature, 103° F. Complained of heat and burning in the stomach. Vomiting frequently a ropy mucus, with watery fluid of an acid reaction. I diagnosed malarial fever with gastritis. I at once ceased to give anything by the mouth but ice and iced water. Gave by rectum tr. opii. m. xx, quiniæ sulph., gr. viij, aquæ, ℥ij, every six hours until the third day, when the amount of quinia was lessened and beef tea substituted for the water. On the twelfth day pus was in the vomited matter and a very little blood. On the twentieth day patient was decidedly better, and continued to improve steadily, until her health was as good as, if not better than, before.

March 8th, 1882, the above patient was again attacked with a slight catarrhal fever, which resulted in gastritis. This attack followed about the same history given above. Had so recovered as to drink two-thirds of a pint of beef tea daily, without unpleasant effect. I felt her recovery certain, when an embolism lodged in the brain, from the effects of which she died. This case could have no connection with malaria.

CASE No. 5. John A., æt. 30. Health good, except nasal catarrh. Family history good. Occupation, a mercantile drummer. Returned home sick. Had taken purgatives and quinine. Pulse, 110; temperature, 104° F. Vomited incessantly a watery fluid of acid reaction and a little mucus. Ordered iced water and ice ad libitum, and nothing else by the stomach. Gave per rectum tr. opii, m. xxv, and quiniæ sulph., gr. viij, and aquæ, ℥ij, every five or six hours. This was continued until the fifth day, when the quinia was reduced to gr. v at a dose, and nutrient enemata substituted for the water. On the tenth day we began rubbing the skin with oleum morrhuæ three

or four times a day. On the twentieth day nervous symptoms manifested themselves, by mild delirium, dilated pupil and loss of sensibility on right side, and he died on the twenty-eighth day. Had benefit of counsel of Dr. Joseph M. Wood, of Kansas City.

Case No. 6. Mrs. T., æt. 54. Health good, except indigestion, result of chronic duodenitis, which had existed three or four years, following an acute attack for which I treated her. There is but little doubt that the chronic duodenitis depended upon imprudence in eating while convalescing from the acute attack. I saw her May 5, 1882. She had been ailing for several days, with nausea and vomiting, attended with diarrhea. Had taken quinine, tr. catechu and laudanum, under the direction of a member of her family. Pulse, 100; temperature, 103° F. Vomiting incessantly watery fluid, acid reaction, with mucus. Bowels discharged two or three times daily a watery fluid mixed with fecal matter. Gave per rectum tr. opii, m. xx, quiniæ sulph., grs. v, and aquæ, ℥ ij, every five hours. The diarrhea ceased after four days. With this exception the patient never improved, but steadily grew worse. Death was preceded by tonic contractions and coma. During the treatment of this case I had the benefit of the counsel of Dr. W. W. Dougherty, and his assistance in making the post-mortem, which was as follows: Liver and spleen slightly enlarged, otherwise healthy. Gall bladder natural. Kidneys normal. No peritonitis. About five inches of the mucous membrane of the jejunum was inflamed. The whole mucous structure of the duodenum was ulcerated; several of the ulcers had penetrated to the peritoneal covering, and had discolored this membrane at this point. Beginning at the pylorus, about two-thirds of the mucous membrane of the stomach was involved. The mucous membrane of this organ was nearly destroyed by ulcerations. Stringy mucus and pus covered its surface. Streaks of inflammation extended to near the cardiac opening. The esophageal mucous structure was inflamed.

The glands of the stomach were either enlarged or in a state of ulceration. I much regret that I could not have had the opportunity of making more post-mortems, but the patients reported were in private families, and permission to make the examinations could not be obtained. This is a typical one of the cases of gastritis which I have seen, and doubtless post-mortems of them would have revealed similar anatomical changes.

The treatment of these cases was as follows. I will mention the remedies and give my estimate of their value, and the symptoms indicating their use:

Opiates.—I give them at the beginning of the case, in sufficient quantities to bring the patient under their influence, sufficient to prevent peristaltic action, after which I maintain the effect until the termination of the case, but never to narcotism. These lessen peripheral irritation, thereby diminishing the tendency to paralysis by reflex irritation of the vaso-motor system, especially in the latter stage. The best mode of administration would be by hypodermic injection. I could use it in this way in only two cases, because of the distance from my office. The next best mode is to give tr. opii per rectum, which, in addition to its other effects, lessens the irritability of the rectum, and could be combined with nutrient enemata and other medicines. Some of the cases could not retain the medicine per rectum, when I gave morphiæ sulph. by the mouth, largely diluted.

Chloral Hydrate.—It was given per rectum in all the cases when the opiate failed to produce sound sleep during the night, in doses of gr. x—xv. I never gave it in the latter stage, fearing its toxic effect.

Quiniæ Sulphas.—It was given per rectum, in doses of from gr. vij—x, at the beginning, which produced its characteristic effect, which was maintained from five to seven days, after which I reduced the dose from gr. ij—iij, and continued to the close. It is my opinion that quinine taken by the stomach converted several simple cases of

catarrhal inflammation of the superficial mucous membrane into that of the deeper structures, and should never be given when there is the slightest gastritis.

Bismuthi Subnitras.—I gave it in a few cases in the different stages without beneficial results.

Potassii and Sodii Bicarbonas.—They were given in the majority of cases after the first, in doses of gr. ij—iij, aquæ ℥j, every two or three hours, after which the patients would express themselves as feeling more comfortable, I suppose on account of neutralizing the acid of the stomach and lessening its irritative effects.

Tr. Digitalis.—It was given after the first few cases in all the cases, in small doses largely diluted with water, sufficient to maintain its physiological effect. I began its use on the first appearance of feeble heart action. In addition to this, it was beneficial by stimulating the kidneys.

Tr. Nucis Vomicæ.—It was given on the first appearance of anemia of the nervous centers, under the principles that govern the administration of digitalis.

Arsenic.—Fowler's solution was given in two cases during the stage of ulceration, and continued two days. In my opinion it increased the irritation.

Argenti Nitras.—It was first given in the pillular form during the stage of ulceration, and invariably increased the irritation. It was combined with morphine. I then gave it in solution, beginning with gr. ½ to ℥ij water, increased gradually to gr. ¼, given directly after emesis, with marked benefit,

Iced Water and Crushed Ice.—They were used ad libitum during the first stage, after which the patients usually preferred ordinary water, and some of them warm water.

On the first appearance of the inflammation of the pharynx and mouth, the symptoms indicated that the esophagus was involved, and I commenced atomizing these parts with tannin and borax.

At the beginning of the second stage and continuing to

the close, whenever the patients would complain of heat and burning and nausea, I would have them drink enough lukewarm water to produce emesis, after which they would be comfortable. These symptoms indicated an accumulation of vitiated secretion, product of inflammation or bile. I had the patients sponged during the latter stages frequently with alcohol, and rubbed several times a day with lard or cod liver oil.

Nutrient Enemata.—They were begun as early as the third or fourth day in every case, and gradually increased to the full capacity of the rectum to retain. I combined with these the medicines that were given this way. Whenever the bowels became tympanitic, I gave a large enema of simple water and rinsed them out thoroughly; if not, I only rinsed them out twice a week.

In addition to the alcohol as a stimulant applied locally, whiskey or brandy was added to the nutrient enemata.

Blisters.—They were applied to the nape of the neck on the approach of passive congestion of the base of the brain, always with more or less benefit. In the latter stages they were applied to the abdomen in some of the cases, with positive benefit only in one. Mustard and hot stupes were applied in a majority of cases to the abdomen, and in three cases cold cloths were applied with marked benefit. In the latter stage the patient must maintain the recumbent position; all efforts of a muscular character must be avoided.

When shall we begin to give nourishment by the stomach? Not until there are no physical signs indicating disease of the stomach. Vomiting gradually ceases, and I never give any food by the stomach until forty-eight hours after it has ceased, then only in weak broths and small quantities gradually increased. If after three days there is no symptom of indigestion, the patient may be placed on beef tea, and gradually increased until it would amount to one-half pint per day, after which the nutrient

enemata might be discontinued. The patient should in no case eat solid food until he has fully regained his health.

In some of the cases reported I think that transfusion of blood was indicated in the prostration of the third stage, and in future I propose in such cases to make trial of this means of treatment.

GLAUCOMA.

By N. W. Harris, M. D., Harriston, Mo.

[*Read before the State Medical Society, May, 1883.*]

THE object of this paper is not to attempt a learned treatise upon glaucoma, but to call the attention of the general practitioner to the very great importance of a more thorough knowledge of the diagnosis of that terribly destructive disease of the eye.

Up to a period of less than thirty years ago, there was general ignorance of the nature of this disease, and no remedy was known. Carter, an eminent English oculist, said the name, glaucoma, was given it rather to conceal ignorance than to express knowledge.

Up to within a year ago, I was almost as ignorant of the disease as I would have been had I never heard a lecture or opened a medical book. The knowledge I have obtained in the last year has, I am sorry to say, been forced on me by personal experience, which I will here relate.

Last August I began to notice that my eyes did not feel right. I frequently had to lay down my reading and rest them. At first I attributed it to the great amount of yellow-blossom bloom in the orchard adjoining the yard on the south-west. This feeling of weakness and discomfort, with little or no pain, was more manifest in the left than

the right eye, and increased slowly, both eyes feeling too hard and full. About September 20th, I was suddenly attacked with an excruciating pain in the left temple and eye. No one, who has not suffered with it, can conceive of the horrid pain I endured, worse in the afternoon and early night, yet intense at all times. The eye became as hard as marble. There was a tensive pain all the time, with occasional pulsating ones that seemed to throb from the eye back opposite the ear. I was kindly attended by four physicians—good ones too—and all pronounced it facial neuralgia—tic-douleureux—and it was tic-douleureux with a vengeance. But we were as ignorant as babes of the cause.

It is useless to mention the treatment, from which I derived no benefit, except perhaps some palliation. This intense acuteness of the disease suddenly ceased on the first day of October, leaving the vision of that eye so much impaired that I could see only large or bright objects.

From that time on there was a dull, never-ceasing, stretching pain, with occasional throbs, rendering me miserable indeed. Asleep or awake, I was always conscious of the presence of that stretching pain. So great was the discomfort, that I would have consented to have the eye removed had there been no other means of relief.

In this condition I went to Kansas City, on the 8th of November. On the 9th, I visited the offices of three separate oculists. They each, without hesitation, pronounced the disease to be glaucoma, and told me that nothing could relieve the pain, check the disease, and save what sight remained, but an operation, either iridectomy or sclerotomy.

Dr. Tiffany performed the latter operation the next day, without the use of chloroform, as he feared it would cause vomiting, and I preferred not taking it for a more important cause.

He placed a drop of eserine in each eye, bandaged them, and sent me to my lodgings, where I remained in darkness three days and nights, except when he came to examine.

They were not three irksome days and nights, as you might suppose, but a period of sweet rest. I slept like a healthy infant.

This disease, like cataract, when it attacks one eye is very apt sooner or later to attack the other. In my case, the right eye evidently is, and has been, slightly affected with it, but the acuteness of its vision has not been destroyed, only weakened. Dr. Tiffany hopes, by the judicious use of eserine, to abort the disease in that eye. Whenever the eyes begin to pain and feel too hard, I have a drop of eserine put in them, which relieves the pain, and in a short time causes the eyes to secrete and get softer.

An idea I got from De Wecker, of gently rubbing or kneading the eyes, often produces the same result. Vision, in the eye operated upon, has not diminished any since the operation, but, I think, slightly improved.

A few words as to the cause of glaucoma. It is a disease almost entirely confined to persons past the meridian of life. Persons with defective eyes, who fail to use glasses suited to their conditions, by straining the accommodation of the eye may and often do produce glaucoma.

Others who have normal eyes, as I am satisfied I had, may, by a series of years of abuse by hard reading, produce the disease. I have been an incessant reader as far back as I can remember. As a student and practitioner, I have read more at night than in day-time. For the last twenty years, I have noticed that my eyes bore night-reading better than any of my acquaintances did. Have often met men who were twenty years my juniors who were astonished at my ability for night reading, saying that they could not stand as much. But for the last few years I have felt that I was overtaxing my eyes, yet I read on, and am now paying the penalty of my temerity.

ON THE USE OF GELSEMIUM IN INTERMITTENT FEVER.

By Dr. N. B. McKay, America City, Kansas.

AFTER years of careful trial, I have come to use gelsemium in cases of chills with fully as much confidence as ever I used any of the preparations of bark. I was led to use it at first by reflecting on the entirely opposite effects of some medicines on the economy, in large and small doses. Those who use this medicine claim for it nervine, anti-spasmodic and febrifuge qualities of much power. After using it quite extensively in various cases of disease, I am led to believe it to be one of the most worthy remedies we possess, worthy of careful trial by those who have not used it. It will be found applicable to a great variety of abnormal conditions, giving satisfactory results in a greater number of cases than any other single remedy. But in this paper I wish to speak of its use in intermittent fever, chill fever, ague. Used in ordinary doses, it will not cure chills; given in doses of three to ten drops every two to three hours, it will not be likely to have the desired effect. If the stomach has been prepared for it by the use of a pill or two, or three, composed of podophyllin and leptandrin, with solid extract of hyoscyamus, half or three-fourths of a grain each, one at a time, gelsemium will arrest chills as often as any other remedy. I give the fluid extract in *one-quarter* to *one-half drop doses* once in twenty or thirty minutes, beginning usually three hours or so before the time of the expected chill. This for adults; children, much less. If this does not succeed, I do not *increase* the dose, but *lessen* it.

I usually prepare the medicine for use by putting, say, ten drops into a teacup or tumbler, if for immediate use, and measuring in three or four teaspoonfuls of water to each drop, and giving in teaspoonful doses as stated above. If to be kept for a few days, I put in camphor or pepper-

mint water, which helps to keep it sweet; or, where there is much headache, I put in bromide of potassium, and that helps to keep it. Where parties live at a distance, I add glycerine in place of one-fifth or one-fourth of the water, and then it will keep indefinitely.

This medicine, prepared in this way, will rarely fail to quiet any nervous chill or rigor after it is fairly under way. In such cases I give it sometimes as often as every five minutes in severe cases, and it has never failed me. I have never had occasion to use it in puerperal convulsions, but should not hesitate to use it as last mentioned, and should be confident of the best results. Some will spurn this remedy thus used, on account of its extreme simplicity and size of dose; other some, because of its cheapness and other reasons. A few will try it, and not being careful about the amount, giving too much, will be disgusted and discard it; while other few will try it faithfully and carefully, and the more they use it the more they will prize it.

It is cheap, easy to take, and very effectual.

Niagara University.—We have received an announcement of the establishment of a Medical Department of Niagara University, an institution which was founded some twenty-seven years ago, and incorporated as an institution of learning twenty years ago. It is the intention of the trustees, as stated in the announcement, to take at once an advanced position as regards requirements for graduation.

We are informed that the new school has the hearty support of the best part of the profession of that part of the Empire State, and that the outlook for it so far as appears to one visiting the place is most satisfactory. The work of the school is intended to be in the interests of higher medical education, and will be carried on somewhat after the plan of Harvard University. The lectures commence October 10, 1883.

CASES FROM PRACTICE.

ST. LOUIS HOSPITAL, SURGICAL DEPARTMENT.

Service of DR. N. B. CARSON.—Reported by PAUL Y. TUPPER, M. D.

CASE I.—LITHOTRITY.

J. M. W——, American, æt. 32, single, miner, of good physique, entered Aug. 27th.

History.—Syphilitic history dating back about three years. Underwent course of treatment and was pronounced cured. At present, no indications of the disease. At irregular intervals, has experienced difficulty in micturition. Flow of urine would stop suddenly at times. Blood occasionally voided with urine. Discomfort not sufficient, however, to cause him to seek relief until now. Temperature and pulse, normal.

Diagnosis.—Vesical calculus.

Aug. 28th.—Temperature, F. 98⅘°; pulse, 108.

Operation.—Ether. With patient in dorsal decubitus, Bigelow's lithotrite was introduced. To do this the more readily, the meatus was previously enlarged by incision. Enlarged rugæ of the mucous membrane lining the bladder could be easily appreciated by the instrument. Although patient seemed thoroughly anesthetized, every movement of the instrument would cause a spasm of the bladder, which protracted the time of the operation by rendering it difficult to seize the stone. At no time during the operation did the bladder lose its sensitiveness, notwithstanding chloroform was added to the ether. This is strange, in view of the fact that, prior to the operation and when patient was not anesthetized, the bladder was sounded and showed no sensitiveness.

After crushing, the particles of stone and *debris* were carefully sucked out with the apparatus.

The calculus was composed of a uric acid nucleus, surrounded by a layer of oxalate of lime. Its size was about that

of a hickory nut, and its weight 150 grains. The patient was under the anesthethic almost two and one-half hours.

Ordered morph. sulph., gr. ¼, often enough to keep patient quiet; quiniæ sulph., grs. xv. Milk diet and Bethesda water.

Progress of Case.—6 P. M.—Temp., F. 99⅖°; pulse, 92. Doing well. No unpleasant effects from anesthetic. Complains of feeling tired.

Ordered quin. sulph., grs. x, at 10 P. M.; same at 6 A. M. tomorrow. Continued morphia.

Aug. 29th.—Temp., 99⅖°; pulse, 84. Bright and cheerful. Complains occasionally of pain in back and soreness in thighs; none in neighborhood of bladder. Catheter used three times since yesterday evening. Injected morph. sulph., gr. ¼, subcutaneously, and washed out bladder with tar water.

Ordered quin. sulph., grs. v, three times daily. Continued milk diet and Bethesda water.

6 P. M.—Temp., 102½°; pulse, 100. Felt chilly several times to-day when uncovered.

Ordered quin. sulph., grs. x. Repeat at 10 P. M. Continued morphia and diet. If fever at 6 A. M., give quin. sulph., grs. x; if no fever, grs. v.

Aug. 30th.—Temp., 99½°; pulse, 84, and of good character. No pain in bladder, but soreness through pelvis. Restless last night.

Ordered quin. sulph., grs. x, three times daily. Continue other directions.

Aug. 31st.—Temperature and pulse, normal. Refreshing sleep. Appetite returning. Is cheerful. Has had grs. xxv quin. sulph. since yesterday. Washed out bladder with tar water.

Ordered quin. sulph., grs. v, morning and evening. Dose castor oil.

Sept. 1st.—Temperature and pulse, normal. Bowels moved. Voids urine naturally. Doing well.

The first two times bladder was washed out after operation, a few small particles of stone came away.

Sept. 2nd.—Convalescent.

Sept. 4th.—Discharged well.

A KIDNEY IN THE CANAL OF NUCK.

BY J. D. HUBBARD, M. D., SYRACUSE, MO.

Mrs. B——, æt. 36; weight, 203 pounds; previous health tolerably good; never works at any kind of labor that requires any exertion—not even doing her own house work. Took a dose of *patent pills* (5 of Wood's) on Tuesday, July 24th, 1883. The pills operated by the next day with considerable violence, causing intense pain and distressing straining. In afternoon of same day (Wednesday) she noticed a slight enlargement in the right groin; but, giving her no pain, she thought it was an enlarged gland and paid no further attention to it, but retired as usual Wednesday night. She slept very soundly, not waking during the entire night; in fact, the servant waked her next morning, announcing breakfast. On rising (this being Thursday), she discovered the labium majus of the right side greatly enlarged, yet it gave her no pain of consequence; the pain she did have was vague, and mostly referable to the spinal column; intense itching prevailed and caused her to rub the parts, until she found that rubbing did no good; this itching was a most annoying symptom. She then passed water and noticed that it was quite red; her appetite had entirely disappeared, she could not eat anything, not that she could not retain it on the stomach, but for want of inclination. She did not crave water, nor did she pass more or less than usual, though it continued red; bowels moved Thursday, passage looking normal. Feeling somewhat embarrassed about the condition she was in, she did not make known her situation to the family until Friday; they, however, thought it a trivial affair, and supposed that all would be better by the next morning. Morning came, after a restless night, but found her condition no better; on the contrary, she was rapidly becoming weak, scarcely able to sit up at all; had eaten nothing since Wednesday. I was called in the afternoon of this day (Saturday, 28th). After getting a history of the case, I hastily came to the conclusion that I had a hernia of the intestine to deal with; but upon examination for the physical signs of hernia, I found them entirely absent, except the swelling. Then I thought what else it could be; an enlarged gland next sugges-

ted itself, but I excluded this upon the grounds that the tumor was formed too rapidly; no pain in the region, no inflammatory action could be detected, and because the tumor would slip around very readily, showing that it was not adherent. The womb and ovaries were next thought of, but digital examination showed them to be in position. Then the spleen was looked after, and was found in its place. Now I have heard of the intestine, womb, ovaries or spleen being contained in a hernial sac, and as these were all in their proper position, it naturally brought me back to an enlarged gland. Then examining the tumor more closely, I found it to be about four inches long and about two inches wide, thickness I could not make out, as the patient was quite fleshy. Then it occurred to me that it might be a kidney. Now it may be from ignorance, but I must confess that I had never heard nor read of a kidney in this situation before. I left my patient here, reserving my diagnosis because I was not positive, promising to return the next day. Returning the next day, accompanied by my father, Dr. W. T. Hubbard, I again examined the tumor closely. Father also examined it. We agreed that it must be the kidney, although father stated that he had never heard of such a case. We concluded that the belly was the proper place for the kidney, and that it should be returned; and that in case it could not be replaced, extirpation would be the course to pursue. We attempted to replace it by taxis, but not having enough chloroform with us did not get her fully anesthetized, and we had to quit. This was Sunday evening; patient had eaten nothing since Wednesday, and was rapidly becoming weak. We left her, promising to return the next day. Monday came and found the patient no better; still no very severe pain was felt. With the assistance of Dr. J. W. Marsh and my father, I proceeded to anesthetize her to the fullest extent, using chloroform. Being fully under the influence of the anesthetic, taxis was applied, and after a somewhat prolonged manipulation I succeeded in getting the kidney started in the proper channel, when it went into the abdomen with a decided jump, not stopping until it reached the region of the umbilicus. It made a distinct wave as it passed up. Here I grasped the tumor and examined it. Dr. Marsh and father also examined it there, and

pronounced it the kidney. It still floats in the abdomen; I have examined it several times since.

Farther examination into the history of the case indicates that she has probably had a floating kidney for a year or two.

The next day after I reduced the hernia, she found that her appetite had returned; she ate very heartily in the morning, also noon and night. She is recovering rapidly, and already going around. She wears a truss, of course.

How did the kidney pass through the canal when the patient was in the prone position and asleep? Certainly no very great pressure could have been exerted behind. I offer the following as an hypothesis:

I have already stated that Wednesday evening she noticed a small swelling; now this portion of the kidney had already passed a point of constriction, the arteries being somewhat resistant to pressure allowed blood to pass into this little protruding mass, while the veins being more susceptible to pressure, prevented the ready return of the blood, and, in consequence thereof, hyperemia supervened, resulting in edema or extravasation and swelling; as the little mass grew larger it either pressed the constriction over a little more kidney, or pulled more kidney through, which in turn filled up and drew down more, and so on until the entire organ had passed, when, of course, the circulation was re-established, the edema absorbed, and the kidney reduced to its original size.

I report this case, not that any thing unusual was accomplished in the treatment or the results, but because of the extreme infrequency of such cases.

INVERSION OF UTERUS.—AMPUTATION—RECOVERY.

BY Z. D. FRENCH, M. D., SUMNER, ILL.

January 9th, 1883, I was called to Mrs. C——, of Hadley, Ill. She is 37; married, and the mother of three children, the youngest being past ten. Her health has been good, until in September, 1881, when she was thrown from a wagon onto the hard road. From the effects of this she recovered, but at each

monthly period suffered from menorrhagia and dysmenorrhea, which impaired her health and made her nervous and hysterical. January 8th, 1883, she was badly frightened by two young men fighting in her house. After they were separated and removed she suffered from nervous prostration, and became "unwell." The "show" increased during the night to such an extent that it alarmed the patient and her husband, and Dr. A. G. Baird, of Sumner, Ill., saw her and gave an opiate and fld. ext. ergot, which relieved her.

January 9th I was called to see her, and made an examination per vaginam. Found a tumor in the vagina, about the size of a large orange. The patient being extremely sensitive and nervous I gave an opiate, and after telling the husband my surmise that the womb was inverted, returned to town for assistance, chloroform, etc. Drs. A. G. Baird and W. A. Murphy consented to see the case with me. I say consented, for there was no money in the case. The husband is a cripple, and the family in a most destitute condition.

We proceeded to chloroform the patient, and each in turn made an examination by introducing a hand into the vagina, passing the fingers to the attachment of the tumor. The vagina was large and its walls relaxed; and we found no difficulty in ascertaining to our entire satisfaction that we had an inverted uterus to deal with, and that the inversion was complete.

I at once tried to reduce it by taxis, and was beginning to feel that success would attend the effort, but my hand tired and became numb. Changing hands, I continued the effort, but with no results. My associates each tried faithfully until tired out, when we gave up the effort. For nearly three months from that time the patient remained in bed, losing more or less blood each day, notwithstanding the use of astringent injections per vaginam.

She became very anemic and weak; and it became apparent that she must be relieved soon or die. Under the circumstances surrounding the family—their poverty, and the farther fact that they had all the children they could support, and, therefore, would not be injured by having the ability to reproduce cut off—I concluded to amputate the uterus.

To the husband I stated the case fully, and got his consent

to proceed. On the 29th of March, 1883, assisted by Dr. A. G. Baird, whose advice I had had frequently during the three months preceding, I applied the écraseur and proceeded to cut the uterus through the neck. This was found to be no easy task. The tissues were hypertrophied, the organ being fully twice its normal size. Seven or eight times the wire broke, necessitating the application of a new one. After two hours patient effort the task was nearly, but not quite finished, nor could it be done with the écraseur, owing to the breaking of the wires. I, therefore, tightened the only wire I had left, after getting it applied in the track made by the others, and after getting all the force applied that previous experience taught me the wire would sustain, let it remain for an hour, the patient under the effects of chloroform. I then slowly tightened this wire until it broke. On inspecting the instrument afterwards I found that the tissues remaining uncut were about a half inch in diameter, and probably consisted chiefly of the ligaments. Two days after, I removed the greater part of the body of the uterus, by breaking it down with my fingers and removing it in masses or chunks. The patient made a good recovery, being able to sit up at the end of the second week. She is now in the enjoyment of excellent health and menstruates regularly. The fact of her menstruating caused several M. D.'s (?) to exert themselves industriously, trying to convince themselves and others that the uterus had not been removed, but a uterine fibroid or *something else* had been mistaken for it. I felt called upon to verify the correctness of my report—a short account of the case read before the Centennial Medical Society, at Olney, Ill., May 9th, 1883. I, therefore, requested several medical men of good standing, Drs. Wright, Burnett and Boltson, of Olney, Ill., and others, to see the case and make a thorough examination of it, which they did in June. Their verdict was unanimous that the uterus had been removed, leaving the cervix. Menstruation continues to return with regularity, and Mrs. C—— is in good health and enjoys life to her fullest capacity.

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EDITORIAL.

MEDICAL EDUCATION.

Just now, as the various medical colleges of our own and other cities are about commencing their courses of lectures, our thoughts naturally turn to the subject of medical education.

Whatever of progress has been made in the different branches of medical practice; whatever of improvements has been made in methods of treatment of wounds, or in operative procedures; whatever changes have taken place with reference to views in pathology; there is no subject connected with our profession in which change and progress are more noticeable than in that of medical education.

Less than fifty years ago it was true that there was only one medical school west of the Allegheny Mountains, and the number of those in the Eastern States was small. Now the number of medical colleges scattered over the country is legion, and new ones are organized every year. As a result of this multiplication of schools, it has followed that in a large proportion of them the facilities for thorough education are meager and the talent of the instructors is scanty. There are unquestionably too many medical schools.

On the other hand, there is now an urgent demand on all sides for better education, more thorough training, a longer course of study, and more practical demonstration and teaching than was possible under the old methods of lectures. This demand has been responded to by some of the colleges, which have increased their facilities by the erection of laboratories

for experimental and practical demonstration in chemistry and physiology; have established extensive clinics for instructing students practically in the treatment of various forms of disease; and have raised the standard of requirements for graduation.

Another noticeable feature in medical education during the last few years is the establishment of colleges and special courses for the advantage exclusively of medical practitioners, who, having had some experience in active life, are better prepared than are those who have just commenced work, to know how to appreciate and how to utilize the opportunities offered at such schools.

Another subject of interest in this connection is the relation between the Medical Schools and the State Boards of Health. The rigid enforcement of the state laws regulating the practice of medicine makes it easier for the schools which wish it, to raise the standard of medical education, and will gradually weed out those schools which do not wish or are not able to do such educational work as the spirit of the times demands.

AMERICAN ACADEMY OF MEDICINE.—The annual meeting of the Academy will be held at the New York Academy of Medicine, 12 W. 31st Street, New York, on Tuesday, October 9th (three o'clock P. M.), and Wednesday, October 10th, 1883.

RICHARD J. DUNGLISON, *Secretary.*

INDEX-CATALOGUE OF THE SURGEON-GENERAL'S LIBRARY.—The fourth volume of the Index-Catalogue is about ready for distribution. It carries the work to *Fiz.* Unless Congress makes an appropriation for continuing the work, it will have to be discontinued after the issue of one more volume, as that will exhaust the sum thus far appropriated.

BOOK REVIEWS AND NOTICES.

Hygiene for Girls. By Irenæus P. Davis, M. D. *New York: D. Appleton & Co.* 12mo, pp. 210; cloth.

This little volume is the best of the kind that I have ever seen. It is intended to give to girls and young women just such instruction as they need, and such as they very seldom receive in any systematic form, in order to protect themselves from unnecessary suffering. Many a woman suffers all her life from the results of exposure in her girlhood, which was the result of pure ignorance, and might have been easily avoided had she known at all the importance of taking proper care and how to do it.

The manner in which Dr. Davis has presented these important hygienic facts in this little volume is exquisitely delicate. There is no word that should call a blush to the cheek of any girl or woman; but in simple language, without technicalities, he shows just how a girl must live, what she must do, and what she must avoid doing, in order to preserve in health her wonderful organism.

It is a book which fathers would wisely and well place in the hands of their daughters to be read with care and attention. It is one which mothers would do well to read over and study thoughtfully with their adolescent daughters.

Dr. Davis has given to the subject careful thought; and writes in a style which is at once interesting and impressive. The book ought to have a very wide circulation.

E. M. Nelson.

Illustrated Medicine and Surgery. April and July, 1883.

These numbers of this fine journal are fully up to the standard of those which have preceded them. The April number contains a brief account, by Dr. W. W. Dawson, of a case of Enchondroma of the Left Humerus, with two chromo-lithographs of a most extraordinary growth of this character. A case of Intellectual Monomania, by Dr. W. A. Hammond, is illustrated by one wood-cut. A case of Trycophytis Barbæ, by

Dr. H. G. Piffard, is illustrated with one artotype. Four chromo-lithograph illustrations accompany Dr. T. R. Pooley's case of Rupture of the Choroid. Two wood-cuts illustrate the case of Syphilitic Stenosis of the Larynx. Two wood-cuts again illustrate Dr. Townsend's case of Multiple Sarcoma of the Skin; and three wood-cuts illustrate Dr. Sabine's Plastic Operation for a Deformity of the Lower Lid.

The July number is even more profusely illustrated. First, we have two chromo-lithographs and two wood-cuts accompanying the account of the Removal of an Epithelioma of the Face by a Plastic Operation, by Dr. A. C. Post. Then two wood-cuts illustrate a case of Double Congenital Dislocation of the Hip, by Henry B. Sands. A case of Sarcoma of the Anterior Mediastinum, by Chas. F. Bevan, has two wood-cut illustrations. A case of Cancer of the Breast with Disseminated Nodules, by Geo. Henry Fox, has two chromo-lithographs. Three wood-cuts illustrate Dr. Pooley's paper on Malformation of the Extremities. Six wood-cuts accompany Dr. C. T. Poor's paper on the Operative Treatment of Bow-Leg and Knock-Knee. Dr. Edward L. Partridge has a paper with three illustrations (wood-cuts), giving the account of a case of Still-Birth from an Unusual Cause; while three wood-cuts are given in connection with Dr. J. S. Wight's description of an Apparatus for Fracture of the Lower Jaw.

Transactions of the Medical Society of the State of West Virginia. Sixteenth Annual Session. Held in Grafton, May 16th and 17th, 1883. *Wheeling: Taney Brothers.* 1883. 8vo, pp. 84; paper.

We notice in the minutes of the meetings that this Society is considering the expediency of establishing a quarterly journal in lieu of an annual volume of "Transactions." This subject was referred to a committee, with instructions to report at the next annual meeting.

A paper by Dr. John Frissell, entitled, "Health: How to be Acquired, and How to be Preserved," was referred to the State Board of Health for publication in their *Report.*

The action of the Society was absolutely in favor of supporting and maintaining the Code of Ethics of the American Medical Association.

In the report of the Committee on Epidemic Diseases, we

notice the account of the origin of an epidemic of small-pox in one part of the state from the passage through there of a tramp suffering from the disease.

Dr. E. C. Myers gives a brief summary of the Germ Theory of Disease.

Several papers treat of obstetrical subjects, viz: "The Abuse of Ergot in Obstetric Practice," by Dr. D. Porter Morgan, who regards the use of the drug in the first stage of labor as malpractice, and gives some rules as to the time when ergot should *not* be given; "Puerperal Fever," with special reference to treatment by intra-uterine, antiseptic irrigation, of which he is a warm advocate; "Record of some Anomalous Obstetric Cases."

Dr. Carpenter, in his paper, "Insanity as a Disease," criticizes quite severely the modern methods of treating the insane.

TRANSACTIONS OF MISSISSIPPI STATE MEDICAL ASSOCIATION. *Meridian.* April, 1883. 8vo, pp. 140.

This volume of "Transactions" is well printed, and contains the record of an interesting and profitable meeting of this Association.

In the president's address we notice that attention is called specially to the importance and value of original investigation, and the president advises the offering of prizes by the Association for original investigation, especially as to the true nature and cause of malarial diseases and their treatment.

The Annual Oration, delivered by Dr. G. W. Trimble, discusses "Intemperance as a Disease."

Dr. S. V. D. Hill, of Macon, read a report on Recent Advances in Surgery. He favors modified antisepsis instead of the complicated details of Listerism. He notes the value of absorbent cotton in surgical practice, various modifications of the usual "plaster splints," and other appliances for the treatment of fractures and dislocations, methods of reducing dislocations. He refers to the latest views of surgeons in regard to genito-urinary diseases, Dr. Levis's operation for phymosis, sponge-grafting in chronic ulcers, different methods of treating hemorrhoids. He closes with an allusion to some of the wonderful operations made by Billroth during the last few years.

Dr. Hulbert's paper is a discussion of "Malarial Hematuria." Dr. Gnice considers "The Hypodermic Use of Sulphate of Quinine," in which he criticizes and opposes the teaching that solutions of quinine for hypodermic use should be concentrated and multiple insertions of the needle be made in order to introduce the necessary amount.

Dr. R. A. Vaughan, of Columbus, has a paper on "Vaccination," in which he advocates the use of bovine virus or humanized virus of only a few removals from the cow.

Three papers are contributed by Dr. Jno. Brownrigg, of Columbus, viz: A description of a Splint for Barton's Fracture of the Radius; Appliances for the Treatment of Fracture of the Femur (illustrated); and A Case of External Urethrotomy.

Dr. W. E. Todd reports a case of Rupture of the Uterus, and discusses Typhoid Pneumonia and its Treatment.

Several brief papers of more or less interest fill the remaining pages of the volume: Whooping Cough, by Dr. E. L. McGehee; Trismus Nascentium, by Dr. J. T. Hancock, who also describes what he calls an Abortive Treatment of Pneumonia; Dr. L. W. Mabry gives two pages to a superficial view of the subject of Puerperal Convulsions; Dr. B. F. Kittrell describes a case of Chronic Hydrocephalus; Dr. D. L. Phares writes on Mumps and Metastasis, recommending Lobelia, in treatment. The "Surgical Case" of Dr. R. S. Toombs was a case of an accident caused by a gin-saw. Dr. J. W. Bennett gives the history of a case of Chronic Synovitis, which terminates in recovery after prolonged treatment. Dr. M. S. Craft reports a number of Surgical Cases occurring in his practice, among them being a case of Scirrhus of the Breast, Fracture of the Patella, Hydroceles, Varicoceles, etc., etc., etc.

THE UNTOWARD EFFECTS OF DRUGS. A Pharmacological and Clinical Manual. BY DR. L. LEWIN. Second Edition, Revised and Enlarged. Translated by J. J. MULHERON, M. D., Detroit, Mich. The only English Translation having the Author's Endorsement. *Detroit, Mich.: Geo. S. Davis.* 1883. 8vo, pp. 216; cloth, $2.00.

The study of drugs, their physiological and therapeutic actions, their effects upon the living body in health and disease, is one of the departments of medical study that is commanding most attention at the present time.

Dr. Lewin has made a collection of observations with refer-

ence to the unusual or abnormal effects of different drugs which are scattered all through medical literature, and have not been yet, to any considerable extent, incorporated into the systematic treatises on Materia Medica.

His work has been well spoken of and highly commended by the medical press of Germany, and it enters a field of study and observation scarcely touched by other workers.

No one can be too familiar with the tools which he employs in his work, and this volume will be a valuable aid to the physician in gaining a more thorough knowledge of the remedies which form his equipment in his work against various forms of disease.

This edition of Dr. Lewin's work is translated by Dr. Mulheron, and, as announced by the publisher, is the only translation which is specially authorized by the author, the page proofs of the work having been revised and approved by the author.

BOOKS AND PAMPHLETS RECEIVED.

Alcoholic Inebriety. By Jos. Parrish, M. D. Philadelphia: P. Blakiston, Son & Co. 16mo, pp. 185, cloth, $1.25. (J. H. Chambers & Co.)——Lessons in Qualitative Analysis. By Dr. F. Beilstein. Translated from the fifth edition, with copious additions, including lessons in organic and in volumetric analysis, by Charles O. Curtman, M. D., Saint Louis, Mo. St. Louis Stationery and Book Co., Publishers. 16mo, pp. 154, cloth.——Treatment of Diseases of Children. By Charles H. Goodwin, M. D. New York: Published by the author. 16mo, pp. 284, cloth, $2.50.——A Contribution to the Study of Neglected Lacerations of the Cervix Uteri and Perineum. By Thomas A. Ashby, M. D.——Illustrated Medicine and Surgery. Vol. II, No. 3. July, 1883.——The Practitioner's Ready Reference Book. By Richard J. Dunglison, A. M., M. D. Third edition, thoroughly revised and enlarged. Philadelphia: P. Blakiston, Son & Co. 8vo, pp. 529, cloth, $3.50.——The Opium Habit: Its Successful Treatment by the Avena Saliva. By E. H. M. Sell, A. M., M. D. Jersey City Eve. Jour. Print.——Transactions Mississippi State Medical Association. At Meridian, April, 1883.——Transactions of the Medical Society of the State of West Virginia. 1883.——A Case of Primary Monomania (Primäre Ferrücktheit). By C. B. Burr, M. D. Reprint from the Am. Jour. of the Med. Sci., July, 1883.——Forty-seventh Annual Announcement of the Medical Department of the University of Louisville. Session 1883–84.——Some Points in Regard to Outbreaks of Asiatic Cholera. By Geo. Homan, M. D. Reprint from St. Louis Med. and Surg.

Jour.——Third Annual Announcement of the Collegiate Department of the Minnesota College Hospital, Minneapolis, Minn., 1883–84.——War Department Circular and Form for Recording Autopsies.——On Nasal Cough and the Existence of a Sensitive Reflex Area in the Nose. By John N. Mackenzie, M. D., Baltimore, Md. Reprint from American Journal of Medical Science.——On a Hitherto Undescribed Malformation of the Naso-Pharynx. By John N. Mackenzie, M. D. Reprint from the Archives of Laryngology.——Second Annual Announcement of the College of Physicians and Surgeons of Chicago.——Fourth Annual Announcement of the Joplin College of Physicians and Surgeons, Joplin, Mo. Winter Session of 1883–84.——Hints on the Treatment of some Parasitic Skin Diseases. By Geo. H. Rohé, M. D., etc. Reprint from the Medical Record, June 2, 1883.——The Treatment of the various forms of Acne. By Geo. H. Rohé, M. D., etc. Reprint from the Medical Chronicle, May, 1883.——Pemphigus and Diseases liable to be mistaken for it. By Geo. H. Rohé, M. D. From the Medical News, June 23, 1883.——Transactions of Philadelphia College of Physicians and Surgeons, June, 1883.——Second Annual Report of the Board of Police Commissioners of the City of St. Louis, for the fiscal year ending April 9, 1883.——Report of Proceedings of the Illinois State Board of Health. Quarterly Meeting. Springfield, June 29, 1883.——Fifth Annual Announcement and Catalogue of the Medical Department Arkansas Industrial University. Session of 1883–84. Located at Little Rock, 1883.——Announcement of the Twenty-fourth Annual Course of Instruction at the Miami Medical College of Cincinnati, 1883-84.——The Topographical Relations of the Female Pelvic Organs. By Ambrose L. Ranney, A. M., M. D. New York: Wm. Wood & Co. 8vo, pp. 119, paper.——Extracts from Transactions of the College of Physicians of Philadelphia. Third series, Vol. VI.——Club-Foot; Simple Measures for its Early Relief. By DeForest Willard, M. D. From the Transactions of the Medical Society of the State of Pennsylvania.——Adherent and Contracted Prepuce, commonly called Congenital Phimosis. By DeForest Willard, M. D. Reprint from the Philadelphia Medical Times.——Gray's Anatomy; Descriptive and Surgical. A new American from the tenth English edition. Philadelphia: Henry C. Lea's Son & Co. 8vo, pp. 1023, half-calf.——Gout in its Protean Aspects. By J. Milner Fothergill, M. D. Detroit, Mich.: Geo. S. Davis. Small 8vo, pp. 303, cloth, $2.50.——Hygiene for Girls. By I. P. Davis, M. D. New York: D. Appleton & Co. 16mo, pp. 210, cloth. St. Louis Stationery and Book Co.——A Treatise on the Diseases of the Eye. By J. Soelberg Wells, F. R. C. S. Fourth American from the third English edition, with copious additions by Charles Stedman Bull, A. M., M. D. Illustrated with two hundred and fifty-seven engravings on wood and six colored plates, with selections from the test types of Prof. Jaeger and Prof. Snellen. Philadelphia: Henry C. Lea's Son & Co. Large 8vo, pp. 846, half-Russia. St. Louis Stationery and Book Co.——A Text-book of General Pathological Anatomy. By Ernst Ziegler. Translated and edited for English Students by Donald Macalister, M. A., M. B. New York: William Wood & Co. 8vo, pp. 871, cloth. (Wood's Library.) St. Louis Stationery and Book Co.——Announcement of the Second Year of the New York Post-Graduate Medical School. For the sessions of 1883–84.——Remarks on Hydrophobia. By Charles W. Dulles, M. D. Reprinted from the Philadelphia Medical Times.——Advertiser's Reference Book. Pub. by Duncan Sniffen.

TRANSLATIONS.

CATARRHAL ULCERATIONS.

Address before the Berlin Medical Society, by R. VIRCHOW.—Translated by DR. H. W. HERMANN, ST. LOUIS.

Continued from September COURIER.

The remaining mucous membrane, nearly the whole extent of the respiratory tract, the alimentary canal from the cardia to the anus, the uterine mucous membrane, the Fallopian tubes, etc., are surfaces where generally, according to my opinion, not even erosions occur. Recently I was obliged to recall an old reminiscence against my friend Cohnheim, bearing on this point, and I must refer to it on this occasion, because there is a kind of erosion found in the midst of cylindrical epithelium. But these are entirely different from those just discussed. During profuse secretion, when large quantities of watery products are thrown off, erosions occur as blisters, or vesicles appear on the external skin. Inflammatory affections, which would form vesicles on the skin, may immediately form erosions on a mucous membrane with cylindrical epithelium. The attachment between the cells of pavement epithelium is so close that the epidermis offers resistance to the exuding fluid. This fluid collects and forms a cavity or vesicle under the surface, and the layer of epidermis temporarily preserves its continuity. A mucous membrane with cylindrical epithelium is a delicate organ where blisters or vesicles are never formed. Vesicles in the stomach, in the intestines, and in the trachea are something different from blisters on the external skin. Vesicles in the stomach are dilated lobuli of glands, which project from the surface. There is no vesicular gastritis or vesicular enteritis in which the superficial epithelium is lifted off; if so much fluid exudes from a certain spot that it cannot pass through by simple transudation, the epithelium is loosened

itself and cast off. That is the case in all diseases associated with severe purging diarrhea with tenesmus. I have first observed this in cholera—not I alone, but others too. In a later epidemic, sceptics came who, curiously enough, could not find any epithelium in the discharges. But I have found it the same way in *typhus exanthematicus* (spotted fever), when that was associated with severe diarrhea. Of course these are observations on patients, not on corpses. In the latter, I saw in the colon, in severe cases of abdominal typhus in which the patients had suffered from severe diarrhea, that cylinder epithelium of the small intestines still in continuity as it was on the villi, in the form of a glove. We find epithelium of the small intestines in the colon certainly the best evidence that erosive conditions really occur in the former. In my opinion, the history of erosions of the intestines is still to be made. I am not in a position to supply the deficiency entirely, because our examinations are made in a stage too late to ascertain certain facts in regard to the conditions during life, when decomposition of the contents and secondary changes have already taken place. So we are dependent on single fortunate cases, and it will be essentially necessary to watch for such opportunities; and I am glad to direct the attention of clinical physicians to the fact that this topic is to be studied more minutely in the living by microscopical examination of the feces.

The mucous membranes which have been deprived of their epithelium by such extensive and sudden exudations, are naturally exposed to all kinds of injuries. Think of the contents of the bowels, in which everything imaginable may occur, where all kinds of bacteria develop, and where every amateur may find anything he wishes. Only yesterday I received a notice which indeed surprised me, because the observer claimed to have found tubercle bacilli in the feces of non-tuberculous subjects. I do not wish to comment on this, I only mention it to exemplify what a variety of things may be found in the stools. Now, as long as the surface is protected by the sufficiently thick layer of epithelium, these masses glide over the surface without doing any harm, as we often experience, fortunately for us. But when the surface of the mucous membrane itself is exposed, then settlements of new colonists easily take place in the unprotected spots. The great

mass of bacteria, even if the bacillus tuberculosum is not among them, is always ready to settle down there.

I wish to state here, that among the processes which produce eroded conditions in the bowels are many so-called medicine diseases. I remind you of the drastic cathartics; as, for instance, preparations of mercury. When these are given in a certain strength, eroded conditions easily take place in the colon; and in these places then this wicked congregation thrives. Then we call it diphtheria; it is generally considered primary. Well, one can say that in these spots, which have been strongly irritated by drastic cathartics, a real genuine dipththeria has developed itself. Corrosive sublimate can, for instance, produce diphtheria in the intestines, of course only in so far as it loosens and prepares the ground on which the already existing parasite may take hold. Then a diphtheritic ulcer may form. Here we first have the erosive, then diphtheritic infiltration, and finally an ulcer, which itself is diphtheritic.

I will presently give you a marked example of this. It is what was first called in Prag. uremic ulceration. This affection also generally begins with severe diarrhea. It is a condition where the excretion of urea is very much retarded, where urea remains in the blood in large quantities and a vicarious excretion takes place from the bowels. The urea in the intestines splits up into carbonate of ammonium in such quantities sometimes that one can smell it at a distance of four and five steps when the body is opened. There we can then see the whole series of changes: first, erosions, then real diphtheritic conditions, and finally, ulcerations. Consequently there are no uremic ulcers which are directly produced by uremia; but the uremic ulcer is, if we wish to designate it anatomically correctly, a diphtheritic one. The uremic condition, the large amount of ammonia in the blood, prepares the ground for the diphtheria. Now, if one calls every diarrhea intestinal catarrh, as some incline to do, one can also say this uremic condition is an intestinal catarrh, and consider as catarrhal ulcerations these uremic ulcerations.

So far as I know, the experience had with *angina tonsillaris* has been most instrumental in establishing the term catarrhal ulcer. It is said there is an angina catarrhalis. Now that is

one of those questionable expressions with which one can easily be shipwrecked. The angina is undoubtedly not catarrhal, for we only have an *angina cum catarrho* or a *catarrhus cum angina*, that is a catarrh with implication of the tonsils; it may be also the other lymphatic apparatus of this region. Since we know that the tonsils, the follicles of the tongue and pharynx, are lymphatic organs, the comprehension of many phenomena has been facilitated. The affections of these parts stand in a parallel relation with enlargements of the lymphatic glands elsewhere. Just the same it is with the small lymphatic glands that occur in the intestinal canal (Peyer's glands, solitary glands). Nobody will say, if he sees a patient with *pharyngitis catarrhalis*, and with whom, at the same time, the cervical lymphatic glands are enlarged, that he has catarrhal swelling of the lymphatic glands, or catarrhal cervical buboes. I do not believe anyone has yet gone so far; but with the tonsils this has been done. When they are swollen, and at the same time catarrh exists, it is called catarrhal angina. If accidentally an abscess is developed in the tonsils, it is opened or breaks spontaneously; and if subsequently an ulcer is formed, the chain of circumstances is complete. First, we have catarrh, then angina, then abscess, then ulcer; hence it is a catarrhal ulcer. This argument could be applied to every lymphatic apparatus, and we have plenty of them in the intestinal tract. We find these follicular ulcerations, as they were called sometimes, through the whole extent of the small and large intestines, as far as the anus; and we have had all kinds of interpretations for them. Perhaps I may recall to the memory of the older members the period when catarrhs of the large intestines were the center of clinical interest. There was a time in which follicular ulcerations were diagnosticated by finding small gelatinous lumps in the feces. Unfortunately, however, it was afterwards proven that these lumps, which were taken for mucus, were undigested particles of starchy matter, which can very quickly be colored blue by the addition of iodine. I could never understand how one could hit upon the idea that a lymphatic follicle, having no excretory duct nor cavity, and which could at most only secrete cells or simple fluid, how such a follicle could, all at once, produce gelatinous lumps. In this you can see what one arrives at, if disposed to

accept certain doctrines: catarrhal ulcer, with mucous plugs in the stool, that was a remarkable observation; that made an impression! One would diagnosticate the follicular ulcer right away, with the naked eye, as soon as he lifted the lid of the chamber-pot. That was one of the most surprising achievements clinical medicine had produced.

Aside from this, I must own that that which is so familiar to all at the tonsils, happens in all parts of the digestive tract. Abscesses form in the follicles, open, and leave ulcers behind. I even go farther in the acceptation of these ulcers than the majority of my colleagues, assuming that a large part of the ulcers now called tuberculous are the products of such follicular ulceration. Now I say, if we call these ulcers catarrhal, so that we shall say, henceforth, all ulcers shall be called catarrhal that result from abscesses, with what right would we exclude the erosive and the diphtheritic form which I have described to you? Undoubtedly the abscess is not produced by a catarrh, but by a parenchymatous inflammation, which has its seat in the tissues themselves, and which produces that in the depth which is afterwards seen without any secretion taking place. Besides, it is entirely questionable if all follicular abscesses are necessarily connected with catarrh. In regard to this, I would like to remind you of the *catarrhus siccus* of the intestinal tract, which term has been expressly invented to designate conditions in which are found ulcers in the bowels, but no diarrhea or secretion of an abnormal kind. In this case, they said if it is not a secretory catarrh, it is a dry catarrh. But these lymphatic abscesses are the same thing as when abscesses form in buboes; and these abscesses open, forming *bubones exulcerati.* Indeed one could finally say these are also *bubones catarrhales exulcerati.*

But I shall cursorily touch upon another point, though it pertains to a different, yet neighboring subject. It is that of the deeper inflammatory processes, which occasionally develop at the nearest hard points of resistance. To this class belong certain unfortunate cases where a perichondritis, or even a periostitis develops in the nose. I regret to say, we know much less of these processes than one should suppose. Because the nose is a *terra inaccessibilis* for the pathological anatomist, and clinical medicine has not yet quite managed it.

However, we are acquainted with the process very minutely in the larynx, in the various forms of perichondritis which occur there—*perichondritis arytenoidea, cricoidea, thyroidea;* occasionally we have also a perichondritis of the tracheal and bronchial cartilages. These are phenomena which occur in every large hospital several times in the week, and which, consequently, can be considered common. Now one might as well call these *perichondritides catarrhales*, for they sometimes occur where nothing can be discovered but a catarrh. Sometimes, it is true, we cannot even discover that.

If one reviews the history of this affection, and finds that this same perichondritis occurs with syphilis, typhoid fever, diphtheria and tuberculosis of the larynx, and is always preceded by a syphilitic, typhoid, tuberculous or diphtheritic disease of the surface, and then way in the depth the perichondritis begins and burrows around the cartilage, later on perforates and enlarges the already existing ulcer. When one finds on the other hand, as sometimes occurs, that the surface is not at all changed, but that the abscess developed in the depth simply perforates, so that we have nothing but a perichondritic ulcer; well, gentlemen, in that case, I would say we will always go more surely; we will always preserve our discretion better, secure our judgment, if we do not confound this perichondritis with some of the other processes, and say offhand this time it is catarrhal, this time diphtheritic, this time typhus. But we reserve it to ourselves to determine in every case if it is in connection with other processes, or if it is to be treated as an idiopathic affection, just as we do with abscesses in other parts of the body. If some one should get an abscess in the spleen in the course of typhoid, nobody would think of calling it typhus. But we could do that just as well as to call an abscess in the tonsils or at the laryngeal cartilages catarrhal.

These are my objections against the catarrhal ulcer. I think I have in this communication touched upon at least the main forms which have been called catarrhal by some one or other. As soon as one tries to sift these affections into the different categories, the catarrhal ulcer disappears as if of itself. If the catarrhal ulcer is a definite ulcer that one could recognize as such, then I must say that I have not yet seen it, or have not recognized it. But if this term means only that every ulcer

which forms in the course of some disease which has begun with catarrh is to be called catarrhal, then, gentlemen, you can find the same ulcers in a list of other affections that have nothing to do with catarrh. For instance, you can find analogous forms in uremia, in typhoid fever, in syphilis, etc. I believe that the comprehension of these forms in the individual case would be decidedly advanced if we could decide to apply terms, in place of these etiological ones, which refer to the essential processes by which the ulcer under consideration has been produced. Then we will get forms which we can differentiate; for an ulcer resulting from diphtheria and an ulcer resulting from an abscess are quite different things, and are best called by what forms the immediate beginning of the ulceration.

After the discussion which followed the delivery of the address, Prof. Virchow made the following remarks:

"I differ from the gentleman mainly herein, that he, as it seems, considers the participation of the mucous glands the main thing in a catarrhal affection. If this view be correct, we must have an understanding as to whether one can speak of catarrh in places where there are no glands. He himself has mentioned the vagina. Is there a vaginal catarrh? That which is secreted there cannot come from glands. It is a secretion from the surface. But I would like to direct your attention to the bladder, which also has but few glands; the gall-bladder is very poorly supplied with glands. Notwithstanding, there are marked catarrhs of the gall-bladder, severe catarrhs of the urinary bladder, and serious catarrhs of the vagina. Consequently I would not like to admit that catarrh cannot occur where there are no glands. Glands are not necessarily implicated. During catarrhs, it is true, glands may undoubtedly become inflamed. Ordinary parotitis is a catarrhal affection which travels by continuity through Steno's duct into the parotid, where, in addition, inflammation of the interstitial tissues is brought on and pus forms. Analogous processes undoubtedly take place on the posterior wall of the trachea. One may speak of a catarrhal parotitis, but you cannot call an ulcer catarrhal because it orginates in a catarrhal parotitis. I would not like to see the term catarrh extended to affections of the external skin. I think we ought to confine it to the mucous membrane."

REPORTS ON PROGRESS.

MEDICINE.

Hypodermic Injections of Ether.—M. OLLIVIER has published a thesis in which he studies the uses and the disadvantages of this use of ether. The injections are of value in all adynamic conditions from whatever cause; in pneumonia, typhoid fever, or other infectious diseases, or from considerable hemorrhage. The injections may be repeated four to six or more times in twenty-four hours, to the amount of a syringeful, twenty-eight to thirty centigrams (one-half to two-thirds of a dram). These injections are as serviceable in the infant as in the adult, and in the former are especially indicated in cases of pneumonia and broncho-pneumonia. Under their influence not only is the strength of the patient renewed, but respiration becomes easier, asphyxia diminishes and we see recovery take place against all hope. In children one-half a syringeful should be injected more or less frequently, according to circumstances.—*Jour. de Med. Prat.*, June, '83.

[In a case reported by the late Dr. John T. Hodgen, ether was injected to relieve syncope which had supervened after passing a sound for the dilatation of a urethral stricture. The patient was a drinking man. The ether volatilized under the skin, producing notable distension for a time. No unpleasant results were produced thereby.—ED.]

Mitral Constriction and Aortic Insufficiency Combined.—DR. DUROZIEZ gives the following results of considerable study of cases of organic heart disease:

The combination of mitral constriction with aortic insufficiency is frequent, its number being half that of pure mitral constriction. The number of men is about equal to that of women. It may continue to forty years without complication. The addition of aortic insufficiency to the mitral constriction is

not favorable to this. As to etiology, acute articular rheumatism is the rule. The double intermittent crural souffle is almost constant. The stethoscopic signs of the mitral constriction are found more or less complete.—*L'Union Med.*, Aug. 10, '83.

Croton-Chloral in Hooping-Cough.—Dr. W. C. Webb reports the use of croton-chloral in nearly two hundred cases of hooping-cough during the last four years. He finds that this drug is singularly well borne by children, and that it must be given in decided doses in order to get the full value of the drug. A child twelve months old will bear a grain of the medicine every four hours, day and night, and not less than this amount should be given in order to get curative effects. This should be continued for a week, and by this time the cough is generally so much relieved that the frequency of administering the medicine may be diminished so as to give it only during the day. Usually in two weeks the cough is under entire control. Children ten to twelve years old will require two grains at a dose, while adults will not tolerate more than four grains every four hours.

Croton-chloral is readily dissolved in tr. cardamom. co. if it be thoroughly pulverized. A mixture of one dram of the croton-chloral in two ounces each of tr. cardamom. co. and glycerine is a good way of administering it. Dose: half a teaspoonful every four hours for a child two years old and under.

The following also is a good combination:

℞ Croton-chloral, - - - - ʒi.
Tr. cardam. co., - - - ʒij.
Tr. belladonnæ, - - - ʒij.
Glycerin, - - - - - ʒiij.

M. Dose: same as the other.—*Am. Pract.*, Aug., '83.

Ether Douche to Relieve Local Pain.—Dr. C. H. Hughes states that for many years he has used the local application of ether, not by spray but by simply pouring it upon the surface, in all painful surface affections and in neuralgias. He has found it more satisfactory than any other agent, except galvanism, in the relief of facial, sciatic, and cervical neuralgias,

curing some recent cases and in all cases affording marked relief. He advises that when used in cases of supra-orbital neuralgia, care should be taken to keep the ether out of the eyes by laying the head back and covering the eyes with a handkerchief. If the ether should get into the eyes or ears the patient should be cautioned not to rub them, but simply to sponge them with cold water and wait patiently till the ether evaporates.—*Med. Times*, '83.

Salicylic Acid in Small-Pox.—C. A. BRYCE, editor of the *Southern Clinic*, reports that a number of cases in which he has administered salicylic acid systematically in the treatment of small-pox, the result has been virtually abortive of the disease. If administered in the papular stage, vesicles seldom formed; if given in the vesicular stage, they disappeared without pustulation. He administered five grains of salicylic acid and ten grains of the biborate of soda every three hours. Dr. Claridge, of Philadelphia, reports a case in *Medical and Surgical Reporter* in which he attained similar results from the administration of ten-grain doses of salicylic acid, in mucilage, every three hours. Both these gentlemen give credit for the suggestion of this treatment to Dr. J. Cailhol, of St. Louis.

Arsenite of Bromine in Diabetes Mellitus.—DR. R. H. GILLIFORD has found that arsenious acid and bromine will unite under favorable conditions, though very slowly, forming a definite salt composed of three equivalents of bromine and one of arsenious acid, represented by the formula $As\,O_3, 3Br$. If water be added before the union of the bromine and arsenious a rapid reaction ensues, water is decomposed, hydrobromic and arsenic acids are formed and dissolved in the water. This solution of acid is much more irritating to the stomach than is the arsenite of bromine, formed as first noted without the presence of water. Dr. Theo. Clemens, of Frankfort, Germany, has been using a compound of bromine and arsenic in the treatment of diabetes mellitus. This has been called a bromide of arsenic, but Dr. Gilliford thinks it is probable that it is either the arsenite of bromine or a solution of arsenic and hydrobromic acids, as noted above. Several physicians in Allegheny, Pa., have used the arsenite of bromine in the treat-

ment of cases of diabetes mellitus, on Dr. Gilliford's recommendation, with marked advantage. The results are yet too recent to make it certain that a permanent cure has been effected, but the indications are most hopeful. The dose of the arsenite of bromine is two drops in water, gradually increasing to five drops.—*N. Y. Med. Rec.*, June 9, '83.

Treatment of Migraine.—Dr. W. J. Morton discusses the subject of migraine and finds in the vaso-motor theory a working basis for treatment. He thinks the best evidence points to the cervical sympathetic or its corresponding spinal center as the seat of the disease. There may be either angeio-spastic or angeio-paralytic type of the disease, the spastic form being, however, by far the more common. The treatment which he recommends for the spastic form of the affection is by bromide of sodium, one dram at the very outset, and repeated in an hour and a half if the attack does not cease. He finds this almost always successful, when otherwise the patient would go through the regular course of twenty-four to forty-eight hours of suffering. The same remedy should then be given in doses of fifteen grains three times daily for several months. Glonoin and nitrite of amyl are also found to be serviceable in spastic migraine, acting upon the vaso-motor system probably removing irritability of the centers. Either of these remedies may be used in connection with the bromide and frequently with better effect than alone.

The remedies recommended in angeio-paralytic migraine are strychnia and ergot, especially the latter.—*Med. News*, June 30, '83.

Simple Inflammatory Tonsillitis.—Dr. J. Solis-Cohen treats this affection by a modification of the *guaiac* treatment, which consists in the use as a gargle of a mixture known in the House Pharmacopeia of the Philadelphia Polyclinic as the *Gargarysma Guaiaci Composita.* Two fluidrams each of the ammoniated tincture of guaiac and the compound tincture of cinchona are mixed with six fluidrams of clarified honey, and shaken together until the sides of the containing vessel are well greased. A solution consisting of eighty grains of chlorate of potassium in sufficient water to make four fluid ounces is then gradually

added, the shaking being continued. If this is carefully done *secundum artem*, a not unpleasant mixture will be produced. Without due care, however, the resin will be precipitated. The patient is directed to gargle with this mixture freely and frequently, at intervals of from one-half hour to three hours. In some cases a saline cathartic is first administered. Should any of the guaiac mixture be swallowed it is considered rather beneficial than otherwise, and in some cases it is advised to swallow some of it. Relief is usually experienced within a few hours.

Rheumatic or Constitutional Tonsillitis.—When the first manifestation of disease (aside from prodromic headache, malaise, etc., which may be present or not) is intense pain upon deglutition, causing great accumulation of saliva from unwillingness to swallow the excessive secretion; examination of the fauces revealing perhaps a slight congestion—perhaps nothing; more or less febrile reaction soon ensuing; the case may be assigned to the rheumatic or constitutional group. More or less soreness in the throat is constantly present, respiration often becoming painful, and phonation excessively so. Some hours after, as the headache, pulse, and temperature decline, one or both tonsils become enlarged, usually one consecutively to the other. Usually as the pain in the throat subsides, muscular soreness occurs in the neck back, and loins, often in the sterno-cleido-mastoid of the side corresponding with the tonsil first enlarging. Rheumatic or rheumatoid pains may flit from one portion of the body to another during several days. These cases Dr. Solis-Cohen treats with salicylic acid or salicylate of sodium. The following formula makes a pleasant and efficient mixture:

℞ Sodii salicylatis, - - ʒij.
Ol. gaultheriæ, - - - mj. (vel q.s.).
Liquoris ammoniæ citratis,
Syrupi simplicis, - - āā f. ʒij.
M. Sig. A tablespoonful every two hours.

As soon as the pain is relieved the intervals are lengthened, or salicylate of quinine or of cinchonidine is substituted as a tonic in five grain doses at intervals of four or six hours. During the acute symptoms the patient may be made more com-

fortable by allowing small lumps of ice to melt in the mouth from time to time, or by the use of the compound guaiac gargle.

Stiff-neck, the most annoying of the muscular complications, if severe, is removed more promptly by faradization than by medication; the negative electrode being applied to the painful spot or moved along the course of the sterno-cleido-mastoid muscle, while the positive electrode is grasped by the hand of the same side.—*Med. News*, Aug. 11, '83.

Cannabis Indica; A Valuable Remedy in Menorrhagia.—Mr. J. Brown, of Bacup, observes:

"Indian hemp has been vaunted as an anodyne and hypnotic, having the good qualities of opium without its evils. Also in dysmenorrhea and insomnia it has not proved of much benefit. The drug has almost invariably produced some marked physiological effect even in small doses. Text-books give the dose as ten minims and upwards, but five minims is the largest dose that should be given at first. If bought from a good house, the drug is not inert or unreliable. A drug having such marked physiological action ought to have a specific use as a therapeutic agent. Indian hemp has such specific use in menorrhagia—there is no medicine which has given such good results; for this reason, it ought to take the first place as a remedy in menorrhagia, then bromide of potassium and other drugs. The *modus operandi* I cannot explain, unless it be that it diverts a larger proportion of blood to the brain, and lessens the muscular force of the heart. A few doses are sufficient; the following is the prescription:

℞.	Tincturæ cannabis indicæ, - -	mxxx,
	Pulveris tragac. co, - - -	ʒj.
	Spiritus chlorof., - - - -	ʒj.
	Aquæ ad, - - - - -	℥ij.

One ounce every three hours.

Four years ago I was called to see Mrs. W., aged 40, multipara. She had suffered from menorrhagia for several months. Her medical attendant had tried the ordinary remedies without success. Indian hemp was given as above. Its action was speedy and certain. Only one bottle was taken. She was afterwards treated for anemia, due to loss of blood. Twelve months after this my patient sent for a bottle of the "green

medicine." I learnt afterwards that she had sent this medicine to a lady friend, who had been unsuccessfully treated by another medical man for several months for the same complaint. It proved equally successful. The failures are so few, that I venture to call it a specific in menorrhagia. The drug deserves a trial. It may occasionally fail; this, however, is not to be wondered at in a complaint due to so many different causes, and associated with anemia and other cases of plethora."

Robert Batho, M. D., M. R. C. P., Castletown, Isle of Man, writes in reference to the same subject: "Considerable experience of its employment in menorrhagia, more especially in India, has convinced me that it is, in that country at all events, one of the most reliable means at our disposal. I feel inclined to go further, and state that it is *par excellence* the remedy for that condition, which, unfortunately, is very frequent in India.

I have ordered it, not once, but repeatedly, in such cases, and always with satisfactory results. The form used has been the tincture, and the dose ten to twenty minims, repeated once or twice in the twenty-four hours. It is so certain in its power of controlling menorrhagia, that it is a valuable aid to diagnosis in cases where it is uncertain whether an early abortion may or may not have occurred. Over the hemorrhage attending the latter condition, it appears to exercise but little force. I can recall one case in my practice in India, where my patient had lost profusely at each period for years, until the tincture was ordered; subsequently, by commencing its use, as a matter of routine, at the commencement of each flow, the amount was reduced to the ordinary limits, with corresponding benefit to the general health. Neither in this, nor in any other instance in which I prescribed the drug, were any disagreeable physiological effects observed.

I could say a few words in its favor, as to its action in allaying irritative cough, but I prefer confining myself to a point on which experience has left me no room for doubt."—*Brit. Med. Journal.*

Santonin.—Dr. Lewin advises to give santonin only in solution; and shows that in that form it reaches the small intestines more surely, is not absorbed too quickly, and is more destruc-

tive to the round worm (ascaris lumbricoides) which inhabits the small intestines, than when given in any other form. He mentions several prescriptions, of which we select the two following:

℞. Santonini, - - - - - - gr. iij.
Ol. ricini. - - - - - - - f. ℥ss.
Ol. cinæ. eth., - - - - - gtts. iv.

S. A teaspoonful two or three times daily; or if elastic capsules can be taken:

℞. Capsul gelatin. elast.,
Santonini, - - - - - - gr. i.
Ol. ricini, - - - - - - - f. ℥i.
Ol. cinæ. eth., - - - - - gtt. i.
Reple. - - - - - - - no. iv.

Sig. One to be taken two or three times daily.

Santonin is also useful for the long thread worm (trichocephalus dispar) which resides in the cecum, and the thread worm or seat worm (oxyuris vermicularis) which inhabits the colon and rectum; it must there also be given in oily solution, but as an injection per rectum.—*Berlin Klin. Woch.*

Belladonna Treatment of Hay Fever.—Mr. W. F. Phillips reports the following successful case of treatment of hay fever:

I thought of the neurosis that seems to underlie most cases of this kind, and to constitute the essential cause or predisposition on which the disease depends; of the characteristic symptoms of the malady, the injection of the conjunctiva, the hyperemia and hyperesthesia of the nasal cavities, the excessive secretion of tears and mucus; and then I bethought me of a drug whose physiological action might indicate the possession of the power to control such symptoms. Belladonna was the drug that suggested itself at once, and I determined to give it a trial, all the more hopefully because I remembered how strikingly useful on similar indications, and by a parity of reasoning, I had often found it in ordinary conjunctivitis and simple catarrh. I began with the following prescription: ℞ Succi belladonnæ m. xxiv; aquæ ad ℥iij. Misce. A teaspoonful to be taken every hour until relief is obtained. The medicine was taken without the production of any undesirable

effect, and with very marked advantage indeed—an advantage that became still more evident and unmistakable, both to the patient and myself, when the dose was increased from one minim to one and a quarter (half a dram in three ounces). Once, too, when the eyelids were especially tender, the patient was advised to use the mixture as a lotion to the affected parts, and this local application was found to be a most useful addition to the internal administration of the remedy. Repeatedly, when the symptoms of an attack had been allowed to begin, the patient found prompt relief after a few doses of the drug, the catarrhal affection disappearing first, and then the asthmatic; and on taking it regularly every day after the malady had been subdued, she has found to her delight that she can take her walks abroad through blooming grass and flowers without the least protection or precaution—a thing she had not been able to do for years before.—*Brit. Med. Jour.*, July 14, '83.

The Atlantic Journal of Medicine is a new candidate for the support and favor of the profession. It is published in Richmond, Va., by Drs. Robert B. Stover and Henry G. Houston. The numbers which we have received are very excellent. The list of those who have promised contributions contains a number of those whose names are well known in medical literature. We most heartily welcome the *Atlantic* to our table, and wish the editors such success as their really valuable work merits.

Obstetrical Emergencies, Operations and Therapeutics.—This is the title of a volume now in course of publication by Prof. L. Ch. Boisliniere, who has been for so many years a leading practitioner and teacher of obstetrics in St. Louis. The results of his extensive experience and careful observation will be here presented; and those who know the genial professor will be heartily glad to hear that he has put into this enduring form the results of his study and work. Messrs. J. H. Chambers & Co. are the publishers, and the volume will be issued in good shape within the next few weeks.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Deflected Nasal Septum.

Dr. Todd.—I have a case to report: A boy about 14 years of age was brought to me with a deformity of the nose. He had been playing base ball, and had been struck by the ball on the nose, with resulting deformity. The septum was apparently crushed in. I had seen the patient some time before, but considered him at the time too young for an operation, and advised that it should not be meddled with.

The nose was twisted to one side—towards the left; he had much difficulty in breathing through the left nostril. The mother was very anxious that I should do something for him, so I concluded to try and remedy the deformity. The left nostril was occluded, and the septum pushed to one side more than I had ever before observed, even as the result of an accident. It entirely blocked the left nostril, and presented the appearance of a large nasal polypus; the corresponding hollow on right side of the septum was enough to show that it was a deflected septum, and the history of the case explained the whole matter. After examination I concurred with the mother that it was time to do something to restore the septum to a normal position. The gentlemen are aware that Dr. Steele has been particularly active in introducing into this city the operation for restoring the deflected septum, which is so common a deformity, and that he is the inventor of a very ingenious instrument: It is a forceps with two blades; a blunt blade which is introduced into one nostril, and a cutting blade, with radiating cutters, into the other; the two in closing making a star-shaped incision. Then he had an oval plug made of ivory or ebony to fit the nostril; the deflected septum was pressed into its proper position, and kept there by such a plug, which fitted very nicely by a pointed projection into the little recess

which seems to have been purposely made under the tip of the nose. Dr. Steele took much pains in having this plug shaped exactly right. It seemed to me that Dr. Steele's operation was not appropriate to this case. The boy's nose was small, and in the next place it did not seem to be necessary to make so extensive an incision; besides, I thought if we could avoid cutting entirely through the septum—if we could avoid cutting through the mucous membrane on both sides—incising only the convex surface, we would do much better; there would be less danger of sloughing. Dr. Steele assures me that he has never had any trouble from this cause in his cases. He has operated a number of times, as has also Dr. Glasgow, with the same experience. I thought that if a curved incision should be made on the convex side, passing obliquely through the mucous membrane and cartilage, there would be less danger of sloughing. I experimented on the cadaver, and found that the operation was quite feasible. Dr. Eversole, who is present, assisted me in the operation. I used a sickle-shaped knife, cutting with the point, having one finger in the other nostril to cut upon, so as to avoid injuring the mucous membrane on the other side; there was so little room for the work that after all pains I did puncture it at one point. The gentlemen will see at once that if we make an oblique incision through the cartilage, as represented in the diagram, and press it into place, the upper edge of the cartilage will slide over the lower and adapt itself. I intended, as the cartilage slid down, to cut off the edge of the upper fragment so that there should be no tendency to recurrence of the deformity, but on account of the smallness of the space, and the very abundant hemorrhage, which I found difficult to check, it was not possible to carry out the plan. I, therefore, forcibly straightened out the septum, and for the first two days put in simply a pledget of cotton saturated with carbolized oil. Now, the plug that I used is something that I want especially to call attention to. Thinking about the case, it struck me that the proper material to make the plug of was gutta percha. Of course the plug has to be of the exact size; if too small it will drop out, if too large it causes ulceration by its pressure. Now, it is a great inconvenience to have a plug made each time by the shop men. Keeping gutta percha on hand, all that is necessary is to have

hot water ready, and as soon as the patient is operated upon to make a bit into a suitable plug. The plug may be roughly made beforehand. Immediately after the operation it can be fitted into the nostril, or subsequently altered, if necessary. It is very easy to mold the plug to any shape. The plug should be pierced and a looped thread inserted so that it may be easily removed. A plug of any shape can be thus made and fitted in a few minutes. This procedure evidently is vastly to be preferred to the use of harder materials, which have to be whittled out and polished. The gutta percha hardens very quickly on being placed in cold water.

I directed the patient to take the plug out at bed-time and to place it in a solution of carbolic acid (although that was hardly necessary), and to replace it in the morning. He had no trouble whatever in putting it in. The point catches right snugly in the little cavity at the tip of the nostril. The boy visited me occasionally in order that I might see that the septum was in place. The danger was, that as no cartilage had been removed it might gradually, by its elasticity, restore the original deformity.

The boy now breathes through the nostril, and the deformity is greatly relieved, although not perfectly.

Dr. Leete.—I would like to ask the doctor if I rightly understand him to say that Dr. Steele's instrument makes a stellate cut; didn't he cut out a section?

Dr. Todd.—No, sir! This stellate incision of the septum allows the parts to fit themselves to their proper position. To cut a piece out of the septum is very undesirable. Cartilage is a tissue of low organization and easily ulcerates. A perforate septum is much to be deplored.

Dr. Leete.—According to my recollection, he spoke of removing a section. I think he illustrated it by referring to the shape of the skin of an orange, in taking it off he sometimes removed a slim section.

Dr. Todd.—Perhaps, in some cases; but his idea in inventing the instrument was to avoid incising any part of the septum. Any one who has observed a perforation of the septum—the cartilaginous septum, for instance, in cases of chronic nasal catarrh—knows the very serious inconvenience that attends it. The mucous secretion collects around the edges of the

opening, causing an uncomfortable sensation; the patient is constantly picking at these crusts, abrading the tissues and leaving a raw surface. Thus continuous ulceration is caused, and sometimes the entire cartilaginous septum may be destroyed in this way.

Dr. Leete.—How long is it since you operated on that case?

Dr. Todd.—It was last fall.

Dr. Leete.—Has there been any manifestation of feeling in the overlapping edges?

Dr. Todd.—There is no overlapping at all. The margin seems to have been absorbed under the pressure; at first, naturally, there was a decided overlapping. There was a little projection, but it gradually smoothed off, and at the present time there is no trace of the operation at all.

Dr. Schenck.—I would like to ask the doctor why gutta percha could not be utilized still further; how would it do as a means of making a dilatation of the cervical canal of the uterus? How would it do instead of Hanks' dilator, which is now recommended? instead of Barnes' dilator, in cases where it is necessary to make a rapid dilatation of the cervical canal? I think it would make an excellent dilator, and we would have the advantage of being able to make it any size we wanted.

Dr. Todd.—I should think it would be very useful and convenient. I think the physician would be made to some extent independent of the instrument maker and save much time and trouble.

Dr. Leete.—If that lad could have been taken in hand immediately after sustaining the injury, would it not have been practicable to reduce the fracture of the vomer by forcing the parts in position, and by using a plug of gutta percha to correct the deformity in a large measure at once?

Dr. Todd.—I did not see the child until sometime after the injury. I suppose that could have been done.

Dr. Schenck.—There is another question that I would like to ask: could not the gutta percha be molded over an instrument so as to enlarge it? Suppose you wanted to use a pessary in which the posterior bar was too small, could not it be used to make it larger?

Dr. Todd.—Undoubtedly. You can squeeze this out as thin as tissue paper and it is still coherent. I think a great many

more uses might be made of it than have been. One trouble in this case was the very abundant hemorrhage, which it was suggested might be stopped by plugging the nostrils. We have the large palatine vessels passing down upon the septum; it has been suggested that we should use plugs to compress the main trunk so as to get rid of the bleeding; also to plug the posterior nares to prevent the blood running down the throat. In this case some did run down and was swallowed. The passage was so small that it was impracticable to plug it, so the boy vomited a quantity of blood after recovery from the anesthetic.

Stated Meeting, May 1st, 1883—Dr. Todd in the Chair.

Pityriasis Rubra.

Dr. Hardaway.—Through the kindness of Dr. J. B. Johnson I am able to present to you an exceedingly rare form of skin disease.

E. H. C., aged 40, occupation miner, has been in the gold regions for many years. His father and mother were healthy; no history of skin disease. The general health of the patient is good except that he suffered from lead poisoning about twelve years ago. He then enjoyed good health until five years ago in February, when, during the cold weather, he suffered with an attack of fever which lasted six days. The man's business was working in the smelting works, where they refined zinc, lead, etc. He worked in a close apartment where the air was exceedingly confined; and he was much exposed to changes of temperature, from excessive great heat to cold. This was at Helena, Montana. About six days after this fever the eruption made its appearance in the shape of rough scales. This eruption has spread from place to place, from the head to the arms, hips and so on, and in about six months became almost universal. At this time he looks as if he were covered with bran of a red color. The eruption was not very profuse at first, and at one time it partially disappeared. It did not extend so far up on the face at first, only to the eyebrows. Eighteen months ago the eruption assumed its present appearance and has not abated. Before that time the patient was inclined to great drowsiness, but since the erup-

tion has become universal he has suffered from sleeplessness, sometimes sleeping only a few hours in a night. The itching is moderate, increasing when the scales accumulate. It is scarcely necessary for me to say, gentlemen, that this is a case of that rare disease called pityriasis rubra. It is so rare a disease that Hebra had seen only three cases when he wrote his work. There have been a great many cases described which upon investigation proved to be something else. Now the patient will tell you that he can pick up handfuls of scales in the morning from his bed. The whole body is one extensive mass of scales. There is no infiltration of the skin. By pressure you can get a yellowish stain; but there is no infiltration. The skin is readily picked up. These scales come off mostly in large flakes, and some are very large; then there are some small ones. The point of particular interest in the diagnosis is the lack of exudation. There is a total lack of moisture. The nails fell off at one time, and they are now exceedingly brittle. The patient has a feeling of tightness, as if the skin were too small for him, and a stiff, drawn feeling rather than the intolerable soreness and itching that we find in eczema. There is no itching if the skin is kept oiled. There is considerable edema of the lower limbs. The deeper structures are not involved; it is a superficial trouble. There is a local elevation of temperature.

This is a very rare affection in this country; very few cases have been reported. The physician who had the man in charge in Helena, Montana, made a correct diagnosis. A case of this kind may be mistaken for erythematous eczema, scaly eczema, squamous eczema, but if carefully examined it will be found that they are quite different. I believe at certain stages it is difficult to make a differential diagnosis, however, between foliaceous pemphigus and pityriasis rubra, which is possibly closely allied to this condition; but in pemphigus foliaceous there is always, at some stage, a history of blebs which is not found in pityriasis rubra. In this case there is no such history.

It is possible, but hardly probable, that a mistake might be made between this trouble and universal psoriasis, but the scales in these difficulties are very different in color; and then again, it is almost impossible to find a case of psoriasis which

is universal: we generally find some intervening healthy skin, in addition to the difference in the character of the scales. These points, I think, are worthy of being noted. With regard to the cause of the disease little is known. I think very frequently the history of the case shows great exposure, perhaps to great heat and subsequent cold. What the pathology of the trouble is I don't know. Probably it is a neurotic trouble.

Of course the patient's general health is greatly affected. It is impossible to suppose such an involvement of the surface without a deterioration of the general health. We can do nothing for him except keep his skin oiled, and administer diuretics and tonics internally. We try to relieve the skin as much as possible. Of course there are cases on record where patients have recovered, but in Hebra's cases the patients did not recover, and it is probable that this patient will die. Ordinarily these patients die from some intercurrent affection. They may develop tuberculosis. My treatment has been: the internal use of iron and digitalis in large doses. I am also giving him a tea of flax-seed upon the authority of Sherwood, of Brooklyn. I have been giving him a large amount of oil. He has taken cod-liver oil and arsenic in large quantities.

Dr. G. A. Moses.—I don't know whether Dr. Hardaway recollects the case which we both saw at the St. Louis Hospital some five or six years ago. It was a case, I think, of universal scaly eczema. The trouble had existed a great many years. The scaling was quite as great as this. The itching in that case was very marked. We gave him tonics, but of the applications which we used, the one which gave him the most relief, and which he said was curing him, was buttermilk baths. He took them for months. I don't recollect who suggested it, but it was acted on and gave him some relief.

Dr. Prewitt.—I think I have seen one or two other cases of this disease. One I recollect was at London, in 1874, which Mr. Fox showed me at the University College Hospital. This case was recovering, and the doctor was quite enthusiastic about it. He spoke at the time about the immense amount of scales that the man shed. The case was getting better under his treatment—chiefly the use of diuretics. I remember distinctly that Fox laid great stress upon the use of diuretics; and I think he insisted on keeping the patient in bed, at a uniform

temperature. It seems to me that something might be accomplished in a case of this kind by warm baths; mucilaginous size baths. This man is evidently in a very serious condition. The condition is the same as if the whole skin were coated over with varnish. I don't see very well how any one who knows anything about skin diseases could mistake pityriasis rubra for anything else. I can see how it might in some cases be possible to mistake a general erythematous eczema for this trouble, but it seems to me that this is the only condition that could possibly be mistaken for it.

Dr. Todd.—A large amount of water is eliminated from the body—and some organic matter as well—by the sweat glands. In cases where this trouble is present, the sweat glands must be almost entirely obliterated, or at least their function is destroyed, and the kidneys are obliged to do the work of the skin.

Dr. Hardaway.—I will say in regard to the suggestion as to the use of baths, that the man says he has tried all kinds of baths with no effect. He has taken largely of diuretics. It is my intention to keep him in bed, enveloped in oil, as much as possible.

Dr. Prewitt.—I should think to keep the man in bed with the body at a uniform temperature would be very essential. Diuretics, etc., would be of little service as long as the skin is exposed to the variations of temperature. He has practically a new skin every day, and the changes of temperature must be very annoying and irritating.

Dr. Hardaway.—I will mention the fact that I am putting him on ergot largely on theoretical grounds and partly on practical grounds. I think I have seen very good results from the use of ergot in eczema.

Dr. Todd.—In regard to the subject of baths, it occurred to me, although I know very little about skin diseases, but it seems to me that some good might be derived from keeping the man immersed in a water bath, and having it somewhat below the temperature of the body. The doctor thinks that there is an elevation of the temperature of the body. I think we would derive the same benefit that we get in cases of acute inflammation by cold applications. True this is not an acute inflammation, but it must be subacute.

Dr. Hardaway.—I will say that Hebra has tried the method that Dr. Todd proposes.

Dr. Shaw.—With what effect?

Dr. Hardaway.—They all died.

Stated Meeting, August 7th, 1883.—Dr. Lemoine in the Chair.

Abuse of Chrysophanic Acid.

Dr. Hardaway.—I have been struck a number of times with the abuse of the drug now generally known as chrysophanic acid. I have seen a number of cases — I can't remember exactly how many now—where chrysophanic acid, which is, as you know, a very powerful irritant to the skin, was used in a most injudicious manner, so that it has given rise to a great deal of irritation and inflammation. The acid was used because it was supposed to do good in a certain class of cases; or else it was used where the diagnosis was wrong. I have seen a number of cases of eczema that have been treated with chrysophanic acid in an ointment of varying strength—may be thirty grains, fifty or sixty grains to the ounce; and I can recollect three cases. In the first case I was called to see a patient, an elderly gentleman, with a general eczema which kept him very weak and prostrated, by reason of the terrible itching; two medical men prescribed for him an ointment of chrysophanic acid—sixty grains to the ounce—which was rubbed in over one-half of his body; mark you, he was suffering from an eczema rubra from head to foot. The consequences were terrible. I was attending the patient all the time, but the patient was a medical man, and physicians usually suffer from too much advice, as no one is considered to be the physician in attendance. These two gentlemen simply made the suggestion, as they thought it was a good thing, and they may have thought it was psoriasis that the patient was suffering from; but at any rate it caused enormous swelling of the skin, and it was quite a while before he recovered from the effects of the drug. Another case was one of eczema of an acute character, of the scrotum, where the patient was rubbed liberally with chrysophanic acid, causing enormous edema of the parts,

and I almost thought there was going to be sloughing from the appearance of the parts. Another case that I recollect occurred very recently. A young man with erythematous eczema of the face, which was red and somewhat scaly, was told by a physician that he was suffering from psoriasis, and that the drug for psoriasis was chrysophanic acid. Unfortunately, the patient didn't have psoriasis. The parts were liberally rubbed with the ointment—I don't know what strength, but it had the effect of shutting up both of his eyes and causing great pain and agony. I conceive that, with the exception, perhaps, of a very limited number of cases, chrysophanic acid is never of any benefit in eczema. A friend of mine, Dr. Taylor, has written a paper, which was published in the COURIER sometime since, in which he recommends its use in certain cases of eczema—those in which there is great thickening. I have tried it, but have never found it of any value, because it doesn't allay the itching, and the *sine qua non* in this trouble is to allay the itching, of course. Now it is certainly a very improper thing to use chrysophanic acid in acute cases of skin disease, even in psoriasis, where it acts so beneficially. It is my experience that it should be used in a weak ointment, never beginning a case with more than twenty grains to the ounce, and never giving it in any case which is in the acute or inflammatory stage, only giving it in the chronic stage and in a weak ointment. The drug is a direct irritant to the skin, and thereby we get the cure of the psoriasis, because in this disease we need irritation. It acts, I conceive, nearly the same as arsenic in skin troubles; it doesn't seem to have to meet any hypothetical condition, any diathetic condition, so called, but acts upon the skin and produces a certain congestion—that is irritation of the skin. It is known that arsenic produces a whitening of the complexion; it causes it to undergo very rapid cellular change, which accounts for the fact that arsenic beautifies the complexion. It is beneficial in some chronic skin troubles, but should be given in no other stage. It does harm in the acute stage. It causes active tissue change. Chrysophanic acid does the same thing, but chrysophanic acid acts more quickly, because it acts directly upon the part; the effect is produced much more gradually

by arsenic. My remarks are simply to warn against the use of chrysophanic acid in acute affections of the skin, and even in chronic affections it should be used cautiously and in a weak ointment.

Endermic Use of Quinine.

Dr. Hardaway.—Another subject that I want to bring up is the use of quinine endermically. The question arose in my mind from having a sick child—my own—under my charge, recently, where it was impossible to give quinine by the mouth; and it became a serious question how to give the quinine. I imagine the child would have rejected an enema, and the use of the hypodermic syringe seemed rather formidable to think of; so it occurred to me, in view of the wonderful penetrating power of oleic acid, that it was possible we might get an oleate of quinine and rub it in so as to secure absorption of the quinine. It occurred to me, having used in dermatological practice the oleates of various drugs, such as mercury, bismuth, etc., that we might derive advantage from using an oleate of quinine. I happened, about that time, to pick up a journal noting some experiments with the oleate of quinine, and since then I see that a certain drug house is making an oleate of quinine. I saw it in a little pamphlet published by Squibb, of Brooklyn, which he will send to anyone who will send on his name. He publishes it at intervals of a month or two months, just as he has material; and it is nothing against the pamphlet that it is a firm supporter of the old code. In one of these pamphlets there is an article on the oleate of quinine, and the method of preparation. The oleate has been used endermically and is said to have produced marked symptoms of cinchonism, and if this is true I think it might prove a very valuable agent.

Dr. Prewitt.—I have used very frequently at the suggestion of Dr. Saunders the quinia carbamidata, and I have never seen it produce local inflammation, or result in abscess. I almost always have a bottle of it at my house and frequently carry a bottle of it in my pocket, and frequently use it in cases where the stomach is irritable. I think the doctor is mistaken so far as the use of quinine per rectum is concerned. In a large proportion of the children that I have treated I have given enemata containing quinine.

Dr. Hardaway.—In very young children?

Dr. Prewitt.—Yes, sir; and they retained it almost invariably unless there was irritation of the rectum. Children take quinine badly, make a fuss about it, and complain that it is very bitter; and it is. I have had good results from the use of enemata. It is only in cases where there is an irritation of stomach and bowels that you cannot get a good result. I think the quinia carbamidata, or the oleate, as you say, is a very valuable addition.

Dr. Hardaway.—One question that would arise in reference to the use of ointment, this rubbing in of the remedy, is whether it is absorbed to any extent.

Dr. Lemoine.—Not to any great extent in my experience.

Dr. Prewitt.—I should feel that I was wasting valuable time in doing it.

Dr. Leete.—An attempt was made to get the curative effect of quinine by wearing it about the body. I know one person who submitted to great discomfort for a considerable time in expectation of getting the curative effects of the quinine, and I believe he has not been benefitted at all. He wore a pad with drams—and I don't know but that I might say ounces of quinine—for some time, and it was a very hot, ugly application—he enveloped a considerable portion of the trunk with it—that is my recollection of it, with no good results. As to the matter of enemata in young children, I think an enema is more likely to be retained if it is small in quantity and unirritating, and of about the temperature of the body when introduced. The buttocks should be pressed together for a very few minutes. The application may be made when the child is asleep, and if the syringe is carefully managed the child will scarcely be awakened, and the enema is likely to be retained. Of course anything of a biting, irritating character would be rejected. But as to giving of quinine by the mouth to children, I am satisfied that it is practicable to put the quinine in a solution—not a solution either, but a mixture; and it will probably be digested as promptly as if given in the form of powder or taken dry on the tongue, and it will be quite devoid of the taste of quinine. Some years ago I had occasion to administer quinine to some children who couldn't take quinine because such a bitter brought on nausea. There was no previous irri-

tability of the stomach. I remember that I had it put up in about equal parts of syrup of rhubarb and prunus Virginianus, and the taste was almost entirely covered, and this will keep for months. It makes, well I won't say a palatable mixture in the sense that the patients like it, but it is very tolerable.

Dr. Hardaway.—Wouldn't it be better to mix it extemporaneously—to drop the quinine in at the time?

Dr. Leete.—Yes; but it has this advantage that it will keep and it doesn't deteriorate.

Dr. Prewitt.—I have frequently used liquorice to cover the taste of quinine; but I have found it best to carry them separately and mix them extemporaneously, to drop the quinine in and not attempt to dissolve it. I have used the mixture that Dr. Leete speaks of, the syrup of wild cherry and rhubarb. I do that the same way; drop the quinine in at the time of administering it. I drop a grain of quinine into a teaspoonful of the mixture at the time I give it. You can take quinine dry on the tongue without getting such an extreme bitter taste as when it is taken in solution. The more thoroughly it is dissolved the more thoroughly bitter it is.

Dr. Gehrung.—I have found that a good way to give quinine to children is to give them a teaspoonful of some syrup—say syrup of lemon—first and then administer the medicine in another teaspoonful. This covers the taste so that the children ask for the medicine when the time comes to take it.

Dr. Lemoine.—Have you had any experience in the endermic use of quinine?

Dr. Gehrung.—I have had no experience in rubbing it in.

Dr. Hardaway.—I regret that I didn't bring some of the oleate with me.

Dr. Lemoine.—Have you any rules with regard to the strength in which it is to be used?

Dr. Hardaway.—It takes a considerable quantity; enough to rub over a large surface.

Dr. Lemoine.—You waste a large amount in that way.

Dr. Prewitt.—I think we might get slight absorption if kept up a long time; it might serve as a tonic; I think that is possible, but the quantity absorbed, it seems to me, would be very minute; and I don't think it would do any good except by long protracted use, and then probably only as a tonic.

Dr. Lemoine.—I think it might be good as a placebo.

Dr. Hardaway.—I have a little testimony of a negative sort against the oleate. Dr. Wood, of Wilmington, North Carolina, has mentioned three cases in which he used the oleate of quinine; in two cases he gave it to children with the summer complaint for elevation of temperature, and the other case was one of typhoid fever; none of them were cases of malarial trouble. Of the two cases of summer complaint he examined the urine of one for quinine and found none; but he confesses himself that his chemistry was possibly faulty, and may be the method of application. I can say further that some years ago some Italian physician made a series of experiments upon the endermic use of quinine—I suppose quinine combined with the ordinary unguents with entirely negative results, and he came to the conclusion that quinine cannot be absorbed through the skin. An account of his experiments was published in the COURIER.

Dr. Leete.—Would one think that it would be absorbed through the skin when mixed with an ordinary unguent? It would not be dissolved, and is it likely that it would be absorbed if mixed with lard or vaseline?

Dr. Hardaway.—I should think not.

Dr. Leete.—I think practical experience has demonstrated that it would not.

Dr. Hardaway.—The oleic acid compounds have a peculiar penetrating power. Any one who has used the oleate of mercury, and previously used the ordinary blue ointment, knows that the oleate of mercury is much more powerful.

Dr. Leete.—I think it is probable that in chills and fever or malarial trouble rubbing of the skin would be beneficial, as in these affections there is a very sluggish condition of the circulation in the skin.

Dr. Prewitt.—Friction favors absorption. The skin is out of order and the kidneys are overworked when one is suffering from intermittent or remittent fever.

Dr. Lemoine.—I had a case under treatment recently, a lady who was pregnant, and who also had intermittent fever. I succeeded in relieving her of the fever entirely by the use of quinine and other remedies per rectum; but finally the rectum be-

came irritable. I would like to ask Dr. Prewitt if he has ever used quinine hypodermically?

Dr. Prewitt.—Very little; I have occasionally used it that way, it being made soluble by the addition of a little sulphuric acid; it is apt to produce local irritation, and is very likely to result in the formation of an abscess; not necessarily so, however; I have used it without this result.

Dr. Grindon.—I would like to ask if the disappearance of the bitter taste of the quinine in the mixture that Dr. Leete spoke of, the extract of wild cherry and rhubarb, is not due to the fact that the tannate of quinine is formed?

Dr. Leete.—I can't say as to that; I can only answer that the quinine, judging by the disappearance of the chills, was as promptly curative as if given in any other form. I have used it repeatedly with small children; I am not sufficiently expert in chemistry to say whether the tannate of quinine would be formed or not.

Dr. Lemoine.—I think physicians should inquire into the method of administering remedies by the hypodermic needle, as we are probably approaching an epidemic of cholera, and that is the only way we can treat cholera. I think we need not fear cholera or cholera morbus if we can treat it hypodermically. If we can introduce quinine into the system hypodermically in cases of cholera I think we will make a step towards the curing of the disease. There are few remedies which can be introduced under the skin without producing local irritation and abscess. I suppose the gentlemen present have seen the effect of ergotin under the skin; it produces abscess in almost every instance. I have used it in that way and it produced abscess.

Dr. Schenck.—Have you used the fluid extract of ergot hypodermically?

Dr. Lemoine.—No; I have never used ergotin in solution.

Dr. Schenck.—I have never seen any trouble result from the use of the fluid extract of ergot hypodermically.

Dr. Leete.—A physician living about a hundred miles from this city asked me some time since in regard to menthol; what it was, and how it acted. I was obliged to confess ignorance. I raise the question because I want to know something about it. This gentleman asked me if it was a placebo, and I couldn't

tell him. I said I could answer that question about as well as any other that he could ask me about it, as I didn't know anything about it.

Dr. Schenck.—It is a preparation put up by Parke, Davis & Company; it is Japanese peppermint.

Dr. Leete.—In what form is it?

Dr. Schenck.—In crystals; the heat of the hand is sufficient to melt it. You will find in Braithwaite, about three years ago, a series of articles upon the subject—the use of menthol externally and internally. For facial neuralgia it acts very finely.

Dr. Lemoine.—How soon does it relieve the trouble?

Dr. Schenck.—It will relieve as soon as chloroform or any remedy of that kind. It is to be applied locally.

Dr. Hardaway.—Don't the Chinese in San Francisco sell it mixed with equal parts of ether?

Dr. Schenck.—Yes; and I think it is used in London combined with aconite as a local application.

Dr. Lemoine.—I used a mixture last night in a case of my own; a mixture of bromide of ether and alcohol. I applied it very freely and continuously, and had no relief except while applying it.

Dr. Prewitt.—I suspect a better remedy is veratria. I had a patient some three or four years ago on Pine street; a lady who suffered with neuralgia about the head, and I ordered some of it for her. Her husband applied it, and it relieved her, but he got to rubbing his eyes and got some of it in his eyes, and he became terrible frightened and sent to a drug store, and sent for me. When I got there I think he had already applied something to his eyes, but he allowed that I had poisoned him. I told him I hadn't intended it for an eye water by any means; that it was a first rate thing for neuralgia, but wouldn't make a good eye water. There was no injury to his sight from it except temporarily.

Dr. Hardaway.—That case reminds me of a patient who was under the care of Dr. Spencer, Dr. Michel, and myself. He had an eye trouble, an ear trouble, and a skin trouble, and he was eternally making mistakes. He used the application for the eyes in his ear, the ear medicine on the skin, and what was intended for the skin in the eyes, and got up some fearful combinations.

TRI-STATE MEDICAL SOCIETY.

The meeting of the Tri-State Medical Society, held at Indianapolis on the 18th, 19th and 20th of September, was the best in its history.

The attendance was large, probably reaching 250, and the papers, of which there were over fifty, were generally of more than usual interest and value.

Three sessions were held each day, beginning at 9 A. M., with recesses of one and a half to two hours for dinner and supper, and interrupted by no banquet or other festivities, work being the object of the society.

Gov. Porter, of Indiana, welcomed the visiting physicians in a short and appropriate address.

In accordance with a suggestion in the address of the President, Dr. Wm. Porter, of St. Louis, it was decided to change the name of the society, and it will hereafter be known as the Medical Association of the Mississippi Valley, and receive delegates from the territory indicated.

Of the many papers read, it is possible to notice but the few which seemed to produce more than usual interest.

The paper on "Nerve Stretching," by Dr. Wright, of Olney, Ills., favoring the procedure in obstinate cases of sciatica, was well received, and seemed to meet general approval.

Dr. Link, of Terre Haute, spoke in favor of the use of the roller bandage in preventing abscess and erysipelas, and as a dressing for stumps in amputations, claiming immunity from after pain and suppuration. He presented a patient whose hand he had removed Sept. 5th, and upon whom he illustrated his method of applying the bandage. The patient stated that he had not lost a minute's sleep from pain (no morphia being given), and the doctor claimed that in ten days he would be able to endure firm pressure directly over the ends of the bones.

Dr. H. H. Mudd, of St. Louis, presented an interesting paper on "Stone in the Bladder," in which Lithotomy and Lithotrity were compared, the latter being, under certain conditions, generally preferred.

The papers of Dr. Post, of St. Louis, on "Interstitial Keratitis," and Dr. Reynolds, of Louisville, on "Opacities of the

Cornea," were interesting and of value. Dr. Reynolds spoke of a new method of treating corneal opacities by pricking them with a tattooing needle, claiming good results. Dr. Snellen has used the same method in his practice.

"Chloroform in Labor," by Dr. Woolen, of Indianapolis, provoked considersble discussion—the general opinion seeming to be that its moderate use was to be commended when called for by intense suffering, but that profound anesthesia should never be produced, inasmuch as that condition favored post-partum hemorrhage and other dangers.

Dr. S. J. Jones, of Chicago, read a volunteer paper on "The Influence of Errors of Refraction and Defects of Accommodation of the Eye;" also, by title, "A Plea for Early and more Thorough Treatment of the Ear."

During the session letters were read from Drs. Flint and Gross, regretting their absence, and a cable message from Morrell McKenzie, of London, wishing the meeting success.

The officers for the ensuing year are: President, B. M. Griffith, M. D., Springfield, Ills.; Secretary, G. W. Burton, M. D., Mitchell, Ind.; Treasurer, F. W. Beard, M. D., Vincennes, Ind.

The next meeting will be held in Springfield, Illinois, in September, 1884. J. B. S.

THE ROYAL SAXON OBSTETRICAL INSTITUTE, which is situated at Dresden, affords exceptional advantages to the student of obstetrics. The admission fee is only five dollars, and a room in the building costs only twenty-five cents a day. Board is cheap, and hence any one who desires to gain considerable obstetric experience in a short time and at little expense will do well to make use of the opportunities here afforded. The Saxon government not only provides for the care in this institution of lying-in patients from all parts of the kingdom, but pays their travelling expenses from and to their homes. Dr. Winckel, who has had charge of this institution for a number of years, has recently accepted the appointment to a chair in the University at Munich.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

MEDICAL ACT AMENDMENT BILL.—VACATION.—FIRE AT A LUNATIC ASYLUM.—SALE OF POISONS.—OWNERSHIP OF PRESCRIPTIONS.—DRUGS AND INSTRUMENTS.—CHEAP MEDICAL BOOKS.

LONDON, September, 1883.

Since my last letter, the meetings of the British Houses of Parliament have been adjourned for the recess without passing the Medical Act Amendment Bill so urgently longed for by the profession. The influence exercised by the medical corporations who opposed the bill, and whose very existence was threatened should it have passed, was strong enough to prevent its being brought forward for second reading in the House of Commons. These corporations have most likely only gained another year to prosecute their trade in medical diplomas, as there is little doubt that the government will again bring in the bill at an early date next session.

The regular season for holidays is now in full swing, and London is nearly destitute of doctors, at least of those who are doing the best and largest practice, but they will all have returned by the first of October, let us hope, with renewed health and increased vigor, for what is the commencement in England of the *Annus Medicus*. The medical schools all open at this time, most of them with an introductory address by an eminent member of the staff. Professor Huxley is announced as the lecturer at the London Hospital Medical School.

A recent fire at a lunatic asylum near London has opened the question of the provision made at such institutions for the escape of the inmates in case of a conflagration. Every means ought to be taken for preventing such a catastrophe, for noth-

ing more horrible can be conceived than that the poor wretches should be roasted alive without any possibility of effecting their rescue from outside, the windows being securely fastened or barred, and the patients locked in their rooms for the night, as was the case in the instance to which I refer. Two poor patients were thus burned to death, together with the proprietor of the asylum and four other persons engaged in the house. Only some small pieces of charred bones were found in the ruins, and the coroner refused to hold an inquest, as there was no body able to be brought before the court. It is necessary in England that when an inquiry is held by a coroner concerning the death of any person, that the jury shall view the corpse, and this was practically impossible in the recent case, as there was no body to view.

I have, on two occasions lately, been asked by ladies to write orders for them to obtain most powerful drugs for their own use, they not being able to obtain them themselves from a chemist. There are very strict regulations in force in England as to the sale of poisons, as many accidental deaths have occurred from their use; and poisons also have been obtained for criminal purposes. Chemists and druggists now have to enter the sale of all poisons to unprofessional persons in a book, and the book is signed by the purchaser. If very powerful or large quantities of poisons are asked for, the chemist is expected to refuse to dispense them. One of the ladies complained bitterly of the grandmotherly government of England, saying that it was easy enough to procure any poison you wished in America. I do not know whether that is the case, but my patient had traveled on the American continent. The poisons she required were equal parts of tincture of belladonna and tincture of aconite, about four ounces of each; she said she used it to put on her skin when attacked with erysipelas. I refused to put my name to an order for such an amount, as there was a family of young children, and people ignorant of the danger of drugs are liable to leave them about in a most careless manner; had any accident happened either to the children or the lady, the husband would have censured me for giving an order for such poisons. Besides the danger attached to the use of such drugs by an ignorant person, they are not the best appliances for the affection for which they

were required. I have found the simple application of the tincture of the perchloride of iron, or a little flexible collodion, much more useful in attacks of erysipelas. The other lady, an hysterical patient, required pure chloroform to put on her side, under the left breast, where, she asserted, she suffered excruciating pain at times. I offered to prescribe the Linimentum Chloroformi of the British Pharmacopeia, but such a comparatively harmless preparation was rejected. I think she really required the chloroform for the purpose of self administration in the form of inhalation, and had she been found dead in bed, as several other ladies who were addicted to the same habit have been found, I should have been severely censured by her friends and the coroner.

I think the government of such a thickly populated country as England is quite justified in putting some restrictions upon the free sale of poisons. Suicides and murders by poisoning have been much less frequent since these restrictions have been made more stringent. It is always easy to obtain a doctor who can prescribe powerful drugs when necessary, but the fine ladies of to-day like dosing themselves with these drugs, and only use the medical man for the purpose of his signature. If all doctors would refuse to allow themselves to be used in this way, much benefit would accrue to the health and safety of the community. Another aspect of this subject is shown by a case recently reported in the *Lancet* as occurring in France: "A rather curious *procès* lately took place before the justice of the peace at St. Germain, in which a pharmacien was prosecuted for having refused to give up a prescription that was taken to him by a patient. The patient claimed the prescription as being his property, which the chemist contested, but the tribunal decided otherwise, and the prescription was restored to the patient. The *Société de Médicine Légale*, commenting on the case, was of opinion that, although the decision of the judge was unassailable from a legal point of view, yet it was considered that the restitution of the prescription was attended with great inconvenience, as the patient may take it to other chemists successively, and have it made up oftener than may be necessary or good for him, without any reference to the medical man who gave him the prescription. Thus it has lately happened that a female patient spent 1,800 francs, or

£72, for the purchase of morphia for hypodermic injections, which had been only a few times prescribed for her, but which she ultimately employed on her own account. The result was that she became insane, which the medical experts who were required to give their opinion attributed to the abuse of morphia. Whereupon the husband sued the chemist, but a case of the kind not having before been brought to the notice of the court, the present prosecution has been remanded for legislation."

A complete museum of all the drugs and appliances used in medicine and surgery, with some attempt at distinguishing those best suited for the different diseases and injuries, and what are the best instruments invented up to the present time for performing the different operations in surgery, is a great desideratum. Recently when inquiring for the best instrument for treating talipes equino-varus I found that different instruments were used at the different hospitals and sold by different makers, and each instrument distinguished by some surgeon's name who was supposed to have invented it, but the instrument makers in the habit of supplying one hospital were totally ignorant of the appliances used at another. The number of specula, probes, sounds and stems used in gynecological practice is legion; and some must be preferable to others! There certainly ought to be some place distinct from an instrument maker's shop where practitioners could see these several articles and draw their own conclusions as to their relative merits. In most works on therapeutics an attempt is made to classify the drugs under the names of the diseases for which they are suitable, but the mode of exhibition and dose is often omitted. The enterprise of pharmaceutical chemists of the present day has induced them to make and offer to the profession elegant preparations of drugs long recognized as suitable for the treatment of the different diseases; but there ought to be some neutral ground where these preparations could be viewed and compared with each other by members of the profession. With regard to the use of surgical appliances and hospital requisites, some attempt at an exhibition of them was made by the council of the Parkes Museum, who organized the International Medical and Sanitary Exhibition at South Kensington during the meeting of the International Medical Con-

gress in London in 1881, but very little use was made of this exhibition in the way of comparing the different articles shown or deciding which were best adapted for the use for which they were intended.

In view of the approaching winter session Messrs. Cassell & Co., the enterprising publishers on Ludgate Hill, are preparing cheap manuals for students of medicine. They have not before published medical works. These new manuals are written by well-known authors, and offered at a cheaper rate than most medical works are sold at in England. In fact the price asked for medical works is almost prohibitive. In this new departure Messrs. Cassell have most likely taken the hint given to us by many American medical publishers. The only work now ready is the "Elements of Histology," written by Dr. Klein, to be followed shortly by "Surgical Pathology," "Surgical Applied Anatomy," "Clinical Chemistry," "Human Physiology," and a "Dissector's Manual," all written by well-known members of the London medical schools. I have seen some of the plates to be incorporated with the "Dissector's Manual." They are quite unique; the action of the muscles is shown diagrammatically, and the mechanical advantage of each thus explained. I have the St. Louis *Courier of Medicine* sent to me every month, and would be interested to see some remarks by correspondents where the professional customs and laws to which I refer as in force in this country differ from those established in the States; much mutual information and knowledge might thus be obtained. E. V. A.

CONTINENTAL LETTER.

Advantages of Vienna and Berlin.—Hospitals, Clinics.—Strange Scenes in Clinics.—Merits of Different Professors.—Politzer.—Stricker.—Gruber, Schnitzler, Schrötter—Local Anesthesia of Larynx.

Vienna, Aug. 2nd, 1883.

Editors Courier:—To those of your readers who think of coming to this place, and to those who have already been here and enjoyed the clinical advantages offered, a few lines about

Vienna and her hospitals may not prove uninteresting. Allow me to suggest to those first mentioned, that a knowledge of the German language is indispensable, and it is much better to devote a few months' of study to Otto's grammar, at least, before coming on the continent. If, however, German must be learned after leaving the States, I would say, stay away from Vienna until enough of the language is acquired for you to be benefited by the lectures. There is no city in Austria or Germany where it costs so much to live, and where the effort to acquire German is attended with so much difficulty. Vienna has her dialect, and a peculiar jargon it is, composed of words found in no dictionary, and understood by no one outside of the city.

The States furnished nearly a hundred doctors who were in attendance on the clinics here last winter, and with an equal number from Great Britain, it is easy to see how difficult it is to avoid speaking English. The quickest way, of course, to learn a language is to speak it as much as possible. The German of Vienna, as a rule, is badly pronounced and ungrammatically spoken. This applies of course to the common run of mortals as met with on the streets and in restaurants and café houses. A pleasant, furnished room, situated conveniently near the general hospital, can be had for from twenty-two to thirty guldens a month, according to the story in which it is located. A gulden is less than fifty cents. The landlady will furnish every morning a cup of coffee, with two breads, for sixteen kreutzers, or less than eight cents. A good dinner, consisting of a soup, a meat with two vegetables, and some sort of a dessert, can be had in a restaurant for one gulden. This will include as well a couple of glasses of beer, or a small bottle of Hungarian wine. The addresses of several excellent pensions (boarding-houses) are to be had from the U. S. Consul, if this mode of living is preferred to the former. Vienna, with the exception of Paris, is the liveliest capital in Europe; and the inducements offered to neglect study and clinics are great. The "International Café," situated a stone's throw from the entrance of the hospital, is a favorite resort for doctors and students. If report speaks true, many of our countrymen become so deeply interested there that the object they had in coming here is forgotten, and hours are devoted to card playing, to the neglect of clinics. Vienna stands unquestionably at the head of the cities

of the world for opportunities offered for the study of any branch of medicine. Of a population of less than a million, she furnishes more clinical material than London with her five millions. This fact is due to the manner of conducting the clinics. In London the patient receives his medicines to use at home, and generally appears but once a week, when he presents himself with his clinical book, in which entries are made concerning the progress and treatment of his case. On the other hand, here the patient attends the clinic every day, thus allowing the medical attendant to see what effect his remedies are having. There are many hospitals in Vienna, but only three are of special interest to the student who comes here for study, viz: the General, Rudolph's, and Children's hospitals. At the head of these is "Das Allgemeine Krankenhaus," or General Hospital. This is a large two and a half story building, containing three thousand beds, and divided by fourteen courtyards, thus allowing each ward to be well lighted and ventilated. The Rudolph's hospital contains fifteen hundred beds. It is situated inconveniently far from the General hospital, and the few courses given there are slimly attended. The Children's hospital is located centrally, well conducted, and furnishes plenty of material for the study of infants' diseases. The Polyklinik, situated near the General hospital, has an able corps of men connected with it, and any specialty can be studied there with great advantage, owing to the number of patients who present themselves for treatment. The Allgemeines Krankenhaus, however, furnishes the best clinics, and such men as Billroth, Stricker, Arlt, Stellwag, Jaeger, Braun, Politzer, Gruber, Schrötter, Störk, Bamberger, Späth, Neumann and a host of other able teachers, give courses for a consideration. The courses given by these men are going the whole year, with the exception of July, August and September, when their assistants conduct the clinics. The majority of the courses are private, and vary in length of time, and cost. One hour a day for six weeks excluding, and five weeks including, Saturdays. The price varies with the branch of medicine studied; for example—a course in otology costs fifteen guldens, while in laryngology, twenty are asked. Again, courses with Kaposi, or Neumann, are but ten guldens for three months. Billroth's charges are but nominal, and for the clinics of Bamberger and Noth-

nadel, they being a part of the University teaching, no fees are asked. Students of medicine are admitted to the private courses at half price. No doubt many improvements could be made in the manner of teaching, and the management of the clinics here, but yet it would be difficult to know how to go about it. Some of the professors have the bad habit of coming late to their courses, or perhaps of remaining but a little while after they have come. This, however, is the exception, and the major portion of them are hard workers, and try to give a proper return for their fee. The great advantage Vienna has over Berlin, the only other city that can pretend to offer unusual facilities for the study of specialties, is the fact that, with the exception of the courses given at the Polyklinik and Children's hospital, both quite near the General hospital, the student need not race from one part of the city to another to attend a clinic, but can, within the walls of "Das Allgemeine Krankenhaus" receive instruction in any branch from the ablest men in the profession. Further, in Berlin the student, using the latter in the sense of all seeking medical knowledge, has not the privilege in most of the clinics of treating the cases as here. For instance, take one of the courses on the throat or ear here in the hospital: this will be given in one of the wards, and in addition to the sick in the room there is always a great number of out-door patients waiting for treatment. The professor will probably spend the first half of the hour in examining the cases with the class, and the remainder of the time as done by Prof. Politzer, in lecturing on any case of interest present. If an operation is to be performed, the class casts lots, and the drawer of the lucky number operates under the eye of the professor. After the hour is over, any member of the class can stay and assist in the treatment of the patients. The clinics are well supplied with out-door patients, and for a city of its population Vienna furnishes a vast amount of clinical material. This is due to the fact however, that, as in our cities, the clinics have become perverted from their proper use, and are attended by a class of patients who are able to pay a fee. Here you meet with people from every portion of the Austrian Empire, from Germany and Italy, who, attracted by the reputation of the specialists, pocket their pride and attend the clinics.

For the study of otology, laryngology, syphilis, ophthalmology and gynecology, the advantages are incomparably greater in Vienna than elsewhere, owing to the immense amount of material, and the practical handling of this material by the students.

The majority of the patients who visit the clinics are under excellent control, much better than with us, and submit quietly to being overhauled and maltreated. How many patients can you find in your city who would submit to having fifteen or twenty awkward doctors, in succession, hauling on their tongues until they were cut and bleeding from pressure on the teeth, and shoving the laryngeal mirror so far down that the poor devil must try to throw up his boots, while they are attempting to see his vocal cords? Or, how many would sit quiet and have a metallic speculum jammed repeatedly so deep in their ears that they are ready to howl with pain? Yet they do remain quiet here, and if the least objection is made to being examined an indefinite number of times, they are summarily ejected from the clinic.

Why an American should come here to learn surgery is beyond my comprehension. Let any fair minded man walk through the surgical wards of Billroth or Albert, or attend the clinics of these gentlemen, and he must admit that we have nothing to learn from the Vienna school in that branch of science. That order found in our hospitals seems to be wanting—the bandages and splints are not applied with the same neatness and dexterity, and more of a disregard for human life prevails than with us. One day last March, I happened into Billroth's operating room, just after he had removed an enormously enlarged thyroid gland from a woman apparently 30 years old. The weather was raw, both in and out of doors, and to add to the discomfort the floor of the amphitheater was wet. After the dressings were applied, the patient was placed on a cot preparatory to being transferred to the ward. A delay occurred, I will not venture to say how long, and in the meantime she lay with no cover except what her chemise and stockings afforded, though a blanket was conveniently near, if the assistant had thought to make use of it. It is unnecessary to say what the result of all this was. Another case of surgery witnessed: The patient, a man of about 48, was being asphyxiated from a

growth in the larynx. Prof. Schrötter, after using the ether spray over the trachea, proceeded to perform tracheotomy. Everything got along slowly but comfortably, until the patient began gasping, and the assistant reported the pulse nearly gone. Soon respiration and pulse were absent. The professor began working more vigorously, and after an unconscionably long time the trachea was opened and the tube introduced. Then began a remarkable performance at resuscitation. Cold water was squirted from a syringe over the epigastrium. Artificial respiration, after the manner of whom I know not, was tried. Electricity was suggested and employed to no purpose. Schrötter then left the room with the remark that the case was hopeless. The assistant then set to work, and what he left undone in the way of rupturing the dead man's liver, spleen and stomach, was fully accomplished by a buxom German, a friend of his. We who were present felt that had a bold plunge of the knife been made earlier, the man's life would have been saved, after the pulse and respiration had ceased.

Austria is a Roman Catholic land, and in consequence has many church festivals. The majority of the men who give courses are Jews, and it is fair to assume they observe these holidays, not from motives of piety, but from laziness. Be it what it may, the "Feiertage" are faithfully kept.

Of the many lecturers here the beginner in German has probably less trouble in following Prof. Politzer than any other. This is because he speaks loud, distinctly, and not too fast. Go to the right or left of his lecture room, and you come to Billroth or Gruber. The former speaks down in his boots, without raising his head. Gruber talks in a nervous, quick way, and is hard to follow. Not long since, Prof. Arlt, who has labored long and faithfully in the field of ophthalmology, severed his connection with the hospital. The corps of professors, headed by Billroth and Bamberger, and a large number of students, assembled in his lecture room, where much speech making and hand shaking were indulged in. His retirement promotes Stellwag, and brings more prominently forward, as a clinical teacher, an able man, Dr. Mauthner. Stricker's laboratory is commodiously fitted up, and a number of animals and fowls will be noticed waiting their turn to be sacrificed for science. He is a charming lecturer, and impresses you with his earnestness

and sincerity. Prof. Jaeger has been too ill for some time past to continue his courses. Politzer and Gruber, in the General hospital, and Urbantschitsch at the Polyklinik, have all large ear clinics. Gruber has the largest, due, no doubt, to the early hour at which his clinic is held. The old gentleman's most striking peculiarities are his hatred of Politzer, and laying claim to many instruments, and operations in aural surgery, which are not admitted by others to be true. He treats otitis externa with gelatine bougies of morphine. I have seen, however, these bougies removed from the external meatus several days after their introduction almost unchanged, and in one case the mass was a nidus for aspergillus nigricans. Prof. Politzer's clinical room is, unfortunately, too small. With the large class which he has for every course, and the crush of out-door patients, there is scarcely space enough to move around comfortably. The professor discarded, several years ago, the use of the metallic salts in ear affections. He employs boracic acid, or iodoform, in cases of perforation. Alcohol is his favorite remedy for granulations and polypi. I have seen several excellent results following his method of treating sclerosis of the middle ear. A weak solution of bicarbonate of soda was injected through the Eustachian tube: the following day no treatment. Next day the middle ear was well inflated by means of catheter and balloon. Following day no treatment. In other words, always a day of rest between the injection and inflation. He lays great stress on this intermission, and a good inflation of the middle ear. Two cases of otorrhea of months' standing, with total loss of the membranæ tympani, and most offensive discharge, which had withstood all treatment, yielded promptly to a daily washing out of the middle ear with tepid water, injected through the canal with catheter and syringe. Anyone taking Politzer's course will be warmly aided by him, and every opportunity given to learn theoretical and practical otology. Urbantschitsch, at the Polyklinik, uses the rubber tubes, as recommended by Pomeroy, of New York, in treatment of ext. otitis; the result is far better than Gruber's gelatine bougies, or Politzer's expectant treatment. Dr. Eitelberg, Urbantschitsch's assistant, has published in a Vienna journal some cases of sclerosis of middle ear, treated with massage over the mastoid process. The hearing in none was improved, but marked

relief from the noises in the ear was noticed. In laryngology, Schrötter, Störk, and Schnitzler divide the honors. Schnitzler is at the Polyklinik, and his course might be a good one if he did not neglect it so much. Störk is an accomplished operator. Before operating he measures with a sound the distance from the mouth to the growth to be removed. He says that if a patient can be operated on at all, it can be done at the first sitting without any training of the larynx. The malicious ones say that the cases he presents to the class, in support of this, have had secret training in his office. I have seen Schrötter produce local anesthesia of the larynx, in order to remove an epithelioma, situated on the true and false cords. Türck was the first to use this method, and, as modified by himself, Schrötter claims it is a safe procedure, and by its use tracheotomy is avoided: as, for example, where a foreign body is lodged in the larynx. In the case witnessed by me, the patient, a man of about 50, had his throat penciled twelve times with chloroform at 7 P. M. This caused intense redness and free bleeding from the epithelioma. He complained of a moderate amount of pain and burning. At 8 P. M., the larynx was penciled with a one to four part solution of morphine. This also caused free bleeding. After each penciling he was made to gargle with a solution of tannic acid, and cautioned not to swallow any saliva. He was later given a cup of strong coffee, and a watch set over him. It was expected he would be ready for operating on at 9 o'clock the next morning, but the bleeding had not interfered with the action of the medicine, and he was penciled again eight times with a solution of morphine. At 10 o'clock his larynx was fully insensible to any amount of prodding, and the operation was carried out. At this time there was a woman in Schrötter's ward who had experienced this treatment five times, and who declared the pain and discomfort were very slight. Schrötter, however, is the only one here who is bold enough to use this treatment. The others pronounce it highly dangerous, and say it is never necessary to resort to such measures.

In conclusion I would say that if any one has the time, he could not spend it better than by coming here. The fees may be larger now than formerly, but in comparison with London and our medical centers they are low.

M. D. Jones, P. A. Surgeon, U. S. Navy.

COMMUNICATIONS.

EDITORS COURIER:—In the August number of THE COURIER OF MEDICINE the St. Louis Medico-Chirurgical Society enters upon the discussion of one of the most important subjects—the existence or non-existence of sexual appetite in the human female—a subject to which I have given no little attention. Having been engaged in a large town and country practice for eighteen years, I have had opportunities for collecting facts in the premises. I hope the great professional lights of your city will prosecute the investigation, involving, as it does, the highest interest of civilized society. To say that even a small minority of healthy, well-developed women have no sexual appetite, and experience no pleasurable sensations and emotions from coition, is negatived by established physiological laws, and a long series of observations and investigations, made for the purpose of enabling me to make correct estimates as to the term of gestation. In healthy women, whose physiques have not been distorted by millinery trickery, and especially in whom the vital organs have not been embarrassed, compressed and misplaced by that instrument of *torture* and *death*, the corset, and who are not obliged by the conventionalities of life to violate the laws of health habitually, the menstrual flow occurs once a month, with but slight constitutional disturbance. On the other hand, I have observed many who have produced deformity with the corset—eat, sleep and expose themselves at irregular intervals, and change the character and amount of their clothing to suit occasion. Nearly all of these women suffer more or less violently at each recurrence of the catamenia. In some there is menorrhagia, dysmenorrhea, or amenorrhea; in others, uterine neuralgia, endometritis, hypertrophy and elongation of the os tincæ, patulous inflammation of the os, fissures, etc. Very few are exempt from leucorrhea, and ovarian and perimetric troubles. Among the class of women first mentioned I seldom meet with

these troubles, though many of them are constantly at work in the discharge of domestic duties, which are not interrupted by their menstrual periods. Among the votaries of fashion, professional services are often required, from two to ten days. I have often been told by husbands of these women that they (the women) not only have no sexual desire, but manifest the utmost disgust when approached or even caresses are offered, and when they submit at all they complain of pain and other inconveniences. I can not regard this as natural. Its cause is in pathological conditions, brought on by unnatural fashions, modes of living, etc. In it are the elements of great moral and social evils. I can not recall an instance wherein I have been consulted by the husband of a healthy woman who has courage to ignore injurious and foolish fashions. I have made occasion to question their husbands in regard to the periods of sexual excitement. I am made to believe, from facts obtained, that every healthy woman between puberty and the menopause has a period of sexual desire at each menstrual epoch, embracing from two to five days preceding and from two to seven days after menstruation. The opinion is consonant with sound physiological laws. The sensation of fullness, warmth, increased secretion, exalted vascularity of the entire generative apparatus sustain me, to say nothing of the fact that the ovum matures and is discharged at that time, as proven by both ova and Graafian follicles (ruptured) having been found then. (Négrier, Bischoff and others found them in women who died during or near the menstrual period.) Nearly all child-bearing women "count" from the cessation of menstruation. They generally know within a few days of "term."

There is an opinion prevalent here, and in other sections I have visited, that conception cannot occur between the tenth and sixteenth days after the catamenial discharge, and that the sexual function may be indulged with but little or no risk of conception during the intervening six days. I know gentlemen of high standing and profound scientific attainments who maintain that the opinion has support in physiological facts. To the masses the subject of conception, gestation, and especially sexual intercourse, is involved in darkness. The laity feel and express more interest in it than professional men do. There is a vast deal of literature circulating throughout the

country that gives very vulgar, low-toned, and of course erroneous opinions upon these important questions. This kind of literature is eagerly sought after, and studied when obtained. Will it not be infinitely better for all if they can get it in legitimate ways from responsible, intelligent and refined sources? Will it not strike at the foundation of a great and growing moral and social evil? I believe every young man and maiden should be carefully, thoroughly and religiously prepared to accomplish the great ends for which they are ordained by the all-wise providence of God—the propagation and perpetuation of the human race. Until this is done, we may expect puny, sickly, weakly children (mentally and physically), and punier, sicklier, weaker wives.

People will use their utmost efforts to get literature of some character upon these subjects. Will it not be inexpressibly better for them to get correct information, from responsible, refined and legitimate sources? For the good of mankind, I hope your society will take the subject in hand.

OLIVER HICKS, M. D.

ST. LOUIS, Sept., 28, 1883.

EDITOR COURIER:—Please insert in the next number of the COURIER the following letter, a copy of one sent to Dr. Rumbold, in order to explain the apparant inconsistency of the position in which I have been placed.

Respectfully,

T. F. PREWITT.

ST. LOUIS, Sep'r, 25, 1883.

DR. T. F. RUMBOLD, *Dean of Med. College for Practitioners.*

DEAR SIR:—I am in receipt of your announcement for 1883–4, in which my name appears as an honorary member, with my official designation as Dean of Missouri Medical College.

I regret that this publication was made without consultation with me, as I regard it as inconsistent with the position I hold, and involves an unauthorized use of the title of the Missouri Medical College. I must therefore respectfully request that my name be stricken from the list.

It is perhaps right that I should say, that when a certificate of such membership was sent to me some time back I fully intended to write a reply to the gentlemen, thanking them for the compliment implied, but respectfully declining the honor, for the reason above given, that it was inconsistent with my relations to the Missouri Medical College. I failed to do this at the time, and in the many demands upon my attention it escaped me. Respectfully,

T. F. Prewitt.

NOTES AND ITEMS.

Warning to Physicians and Druggists.—Our attention has been called to a circular issued from the Oldberg-Wall Laboratory, which notes some facts that are of material importance to physicians and druggists. We quote the following:

Physicians and druggists frequently make their tinctures, wines and syrups from fluid extracts. Recognizing this practical fact, manufacturers have published formulæ accordingly. To these formulæ are usually added doses and therapeutic notes. All this information is to our knowledge being generally referred to and actually used by both physicians and druggists. But—the formulæ, doses and notes thus scattered abroad through price lists, circulars and labels are not authoritative, no responsible author being named, and should never be used without previous verification.

Actual scrutiny of them reveals gross errors—such as may lead to serious results, sometimes such as are absurd on their very face. In one price list, published in July, 1883, we find over one hundred errors under the head of fluid extracts alone.

In verifying the formulæ published in price lists, or labels, etc., for making preparations for which the Pharmacopeia gives standards, it is necessary to bear in mind that the formulæ of the U. S. Pharmacopeia are by weight only. It will be found convenient also to substitute avoirdupois ounces for parts by weight: the official formulæ are generally for 100 parts; 100 avoirdupois ounces of water measures 96 fluid ounces; 100 avoirdupois ounces of alcohol however measures,

at the most common temperatures, about 123 fluid ounces; and 100 avoirdupois ounces of diluted alcohol about 108 fluid ounces. The measure of the finished product is further modified according to the character of the drug. But formulæ which are so glaringly incorrect as to be unfit for use without thorough revision are not worth revising. They should be discarded for correct formulæ.

These price lists, formula books, labels, etc., were published by manufacturers of pharmaceutical preparations for the convenience and guidance of their patrons.

It seems that these formulæ, etc., are prepared by incompetent employés, who have been rather carelessly entrusted with this responsible duty. The consequence is that preparations made according to these receipts are in several cases so seriously wrong as to be hazardous to use, and in very many instances sufficiently so to render the effect of the medicines extremely uncertain.

Being published by some of the principal manufacturing pharmacists, these formulæ are generally relied upon as correct, and are much used. Neither we nor probably any one else will believe that the manufacturers themselves are aware of the incorrectness of the formulæ they publish in their price catalogues; but the matter does look as if a radical revision were imperatively needed. Meantime doctors and druggists should critically examine such publications before making any use of the statements they contain.

Harvard University Medical School.—The centennial anniversary of the founding of the Harvard University Medical School will be held in connection with the dedication exercises of the new building, Oct. 11, 1883. The occasion will be a most interesting one. The exercises will include an oration by Emeritus Professor Oliver Wendell Holmes. An address by such a man on such an occasion cannot but be most intensely interesting. We congratulate any who may have the privilege of attending these exercises.

Prof. Jno. C. Dalton has resigned the chair of Physiology which he has so long filled in the College of Physicians and Surgeons of New York. His successor is Dr. Jno. G. Curtis, who has for a number of years been the adjunct professor.

ST. LOUIS
COURIER OF MEDICINE.

VOL. X. NOVEMBER, 1883. NO. 5.

ORIGINAL ARTICLES.

SYPHILITIC INTERSTITIAL KERATITIS.

BY M. H. POST, M. D., ST. LOUIS.

[*Read before the Tri-State Medical Society, Indianapolis, Sept., '83.*]

MR. PRESIDENT AND GENTLEMEN: The subject which I have selected, though belonging to a special branch, cannot fail to interest every general practitioner.

The recognition of an inherited syphilitic disease in one member of a family may explain numerous pains and aches, and dyscrasias of constitution, which have before been puzzles to us, in the other members, and instead of groping about in the dark for the cause, and finally having to resort to the shot-gun plan of treatment, giving our unfortunate patients an assortment of iron, quinine and strychnine, washed down with cod liver oil, we can address ourselves directly to the disease with that positive knowledge of cause and effect which makes medicine a science, and which alone gives pleasure or even contentment to those who are conscientious practitioners of it.

The ability to recognize this taint will remove some of those unsatisfactory diagnoses of "scrofula" which are found in the case book of every physician, and which have always seemed to me a refuge for us in our times of ignorance; and if this evening I have forcibly reminded you of one of the methods of differentiating disease, I shall feel amply repaid for presenting this paper.

There is no affection with which keratitis, particularly syphilitic interstitial keratitis, is liable to be confounded, if we remember there is such a disease, and use an ordinary amount of intelligence and care in the examination; and yet it is not uncommon for a case to be brought for consultation, where the doctor has taken it for a case of conjunctivitis, or, as he may call it, red sore eyes. We find the cornea densely cloudy, the iris firmly bound to the lens and the condition of the patient almost hopeless.

From such experiences as these I have been led to believe that the study of this disease has been neglected or forgotten.

Let me remind you then that there is a form of keratitis beginning in the substance of the cornea, seldom leading to ulceration, hence properly called interstitial; having its cause in inherited syphilis, hence properly called specific or syphilitic. This was satisfactorily established by Jonathan Hutchinson, in communications made to the London Pathological Society in 1857–58 and 1858–59, and in his more elaborate treatise on "Certain Diseases of the Eye and Ear Consequent on Inherited Syphilis," published in 1863.

Keratitis or inflammation of the cornea may be divided into interstitial and superficial; the latter is much more frequent, and probably in the majority of cases is dependent upon some traumatic cause, as granular lids or an injury from a foreign body, producing irritation of the anterior epithelial layer, and this irritation extending by contiguity into Bowman's membrane, thence into the corneal tissue proper, and sometimes perforating Descemet's membrane into the anterior chamber.

Interstitial keratitis has been divided into strumous and syphilitic. I am in doubt if all cases are not syphilitic; this opinion is also held by Hutchinson. Of course in this remark I do not include those cases of circumscribed corneal inflammation which result in the formation of abscess.

The patients are usually between five and eighteen years of age—in childhood or youth. They are brought to us because the eyes are sensitive to the light, or because they complain that vision is affected; frequently among the poorer and more careless classes the patient is led to us unable to count fingers at any distance.

Upon inspection we find haziness of the cornea, usually central, and having points of greater density than the general mass of the cloudiness; there are pericorneal scleral congestion, slight conjunctival redness, and some lachrymation; no pus. In the more advanced cases we find these signs aggravated, the cornea having lost its grayish hue and become salmon colored, or even red, from the formation in it of numerous blood vessels. At this time there is danger that one who is not familiar with the disease may mistake it for a conjunctivitis, and may use astringents, when the eye requires soothing rather than irritating.

The diagnosis between superficial and interstitial keratitis is not difficult if we only use our eyes. The great trouble is that we do not see what is immediately before us, in plain sight.

The surest way is to examine the cornea by the method of oblique or focal illumination, when the interstitial is distinguished from the superficial inflammation by the steaminess of the surface, and the absence of ulcers and large vessels, such as are found in pannus.

By this time the diagnosis is made, but here occurs one of the most interesting points in the disease; in the majority of cases the proof of the accuracy of our diagnosis is close at hand, and we assure ourselves that we are correct, as we used to in our school days by proving our examples. It is not necessary to embarrass the mother by asking her

if she has had syphilis, nor arouse suspicion in regard to the father's fidelity, by enquiring if he has had the pox. Usually a wide and depressed bridge of the nose, or seam-like scars extending from the angles of the mouth, answer all questions. If doubt still exists, we have but to open the patient's mouth, and there, in the great majority of cases, the pegged and notched permanent incisor teeth tell us as plainly as the tongue could, thanks to the researches of Hutchinson, one or both of the parents have had syphilis; and we know that the sin of the parent has been visited upon the child. Fortunately in this case knowledge is power, and we hold the key to the situation.

For the disease itself we have a remedy upon which we can rely, to which we can fasten our faith—*mercury*. My experience is that as far as the disease is concerned, with rare exceptions it is all that is needed. Some recommend hot fomentations, the administration of iron and quinine, but the sheet anchor of our treatment is mercury, best given as the corrosive chloride from $\frac{1}{48}$ to $\frac{1}{16}$, or even at times $\frac{1}{12}$ of a grain after each meal, preferably in solution with syrup as a vehicle. Under its influence the cloudiness will grow less, frequently disappear; the acuteness of vision often remains impaired, after attacks of this disease, but in many cases returns to the normal. These results, when we take into consideration that when first seen the patients were practically blind, are very satisfactory.

While the cornea has been clearing, the constitutional condition has been improving, the cheeks and limbs have filled out and the anemia has disappeared.

I remember being told as a medical student that mercury was a tonic, and though it sounded strangely to me then, now I know it to be a fact. I have never seen such positive tonic effects from any of the list of tonics as I have from mercury given in cases of inherited syphilis. I have in mind now a child, who, when first seen, was very much emaciated and wasted away, but who immediately began to gain strength and flesh when $\frac{1}{24}$ gr. of Hg. Cl_2 was sub-

stituted for the quinine, iron and cod liver oil which she was taking.

This treatment must be persisted in till the case recovers. Once in a great while potassium iodide may be required, but such cases are rare, and the iodide of potassium should not be used till the mercury has had a fair trial.

So much for the keratitis itself. Now we must turn our attention to its complication, for it has a complication, which, if overlooked, is even more fatal than the keratitis, viz: iritis. This occurs in the great majority of cases before the original disease has long existed, and the adhesions which result from it, and the deposits of lymph left on the capsule of the lens, are the most difficult elements in the case that we have to deal with. Here most emphatically an ounce of prevention is worth many pounds of cure; as early as possible we must draw the pupillary margin away from the lens, out of harm's way, and keep it there till the danger is past.

Fortunately we again have a trustworthy remedy, *atropia*, or its sulphate, which should be faithfully used, keeping the pupil fully dilated till recovery occurs.

To recapitulate, first we have the cornea infiltrated in its substance proper, the epithelium unbroken, but "steamy," the cornea often reddened by the new formation in its substance of exceedingly minute blood vessels, too minute to be individually recognized, with the pericorneal injection and photophobia incident to any keratitis, but ordinarily not of a high grade. Next, generally, the indications of inherited syphilis, as marked by the depressed nasal bones, and particularly by the notched and pegged teeth.

In treatment we rely upon mercury, preferably the bichloride, taking $\frac{1}{16}$ gr. as the adult dose, and keeping the pupil fully dilated by the use of atropia.

With such a course faithfully and carefully carried out, often for many months, without essential modification, we are almost in a position to guarantee a recovery.

FIRST LECTURE OF THE FIRST COURSE IN THE MEDICAL DEPARTMENT OF NEBRASKA UNIVERSITY, LINCOLN, NEB., OCTOBER 2, 1883.

By L. A. Merriam, M. D., Omaha, Neb., *Professor of the Principles and Practice of Medicine.*

WATER becomes solid at 32°F., boils at 212°. Mercury becomes solid at 40° below zero and boils at 662° above. All solids become gases by intense heat, and all gases become liquid or solid by intense cold and pressure. A rapidly moving body suddenly brought to rest has its force transformed into heat; and if the force be sufficient, the heat developed may transform the moving body into a gas, thereby changing the heat again into motion of a molecular character, well known and described as the kinetic theory of gases. A bar of cold iron under the repeated strokes of the hammer is not only changed in form but becomes hot, while its electrical condition is likewise changed. The immersion of a plate of zinc in an acidulated solution with proper connections develops a current of electricity, which, if sent through a platinum wire, renders it intensely hot. By the chemical union of water with sulphuric acid heat is also produced. The coal made in the laboratory of nature during the carboniferous era, and stored in the earth by the geological changes of the past, serves to warm our homes and protect us from the cold blasts of winter. Changed thermal, chemical and electrical influences of the sun have given change of seasons, through the geologic epochs of the past as well as through that of the present, varying from the perpetual ice of the frigid zone to the ever present bloom of the torrid. By these changes we get the cyclone with its terrible devastation, the sand-storms and siroccos of the Sahara, or the balmy air or gentle breezes of a morning in June. Light produces chemical changes for the photog-

rapher, stimulates the green surfaces of the leaves of plants in the decomposition of carbonic acid gas, and the fixation of the carbon. Light alters the molecular arrangements of some crystals, darkens the skin upon exposure to its rays, and is a very important agent in the molecular changes that take place in the budding, blossoming and fruitage of the vegetable world, and equally so of the various changes of the fauna as of the flora. The conditions of our world have been and are ever changing—physical, chemical, geological, biological, sociological changes—and what we are to-day is the product of the conditions which have preceded or attend us. From influences of some kind man is never exempt. He is moulded and fashioned by them, whether he belongs to the Patagonian giants, the Bushmen of Africa, the Dirt-eaters of the Orinoco, or the highest civilization the world has ever seen. The cooing of a dove, the chirping of a cricket, the patter of the rain, the bustle of business, the language he hears, in short every sound that traverses the intricate mechanism of his auditory apparatus, leaves its impress on the axis cylinder of the nerve and on the neuroplasm of the brain. Nature's changing carpet of green interspersed with its thousands of beautiful flowers, the sandy plains and rocky cliffs, her flowing streams, and the multitude of pleasant and disagreeable things, all convey impressions to the brain that alter the molecular arrangements of tissue therein. Every odor that greets his olfactory nerve, every touch he receives, everything he tastes, all leave their impress. Waves of molecular motion are continually traversing every part of the human system, here arising from pressure of clothing, there from touch, in other parts from heat or cold, or some other condition, either external or internal. Quality as well as quantity of food and drink, the clothing we wear, the beds in which we sleep, the rooms in which we live or labor, the occupations we follow, even our recreations and

amusements, all tend to make us, to mould and fashion our bodies, our minds and our morals.

In this age of steam-power and electricity, when the greed for money, place and power is so great, many of the conditions that conduce to health of body and brain are omitted—sometimes purposely to save time for business, generally however through ignorance of the direful conquences. The result is the undermining of the powers of the system, the inauguration of some form of disease, and perhaps the early death of the victim. Can you stand in the range of a tornado as it sweeps along its course and resist its power? or cast yourself from some lofty precipice and not be dashed to pieces? Neither can man disregard his surroundings, if he wishes good health and long life. We are but a part of the great realm of nature, and we yield to her influences; from them we cannot escape, go where we will.

Universal law prevails and the forces of all nature are correlative and convertible. The laws of life, of health, of disease, death and decay are continually being unfolded to us by the discoveries of earnest workers in scientific fields. Our progress in the treatment of disease goes hand in hand with scientific development in physics, in chemistry and in physiology. Evolved from simple beginnings, the practice of medicine has been bound down by the bigotry and superstition of an ignorant age. Only during the last half century has science come to her aid; and not even yet can we claim to be free from the misty theories and vagaries that have sprung from the errors of the past. We should hold no theory we would not willingly change upon the presentation of sufficient proof. We practice medicine by no set rules except such as science and her deductions demonstrate to be valuable, and we deny for ourselves the appellation of any *pathy*, or any title, and ask only that we be known as scientific physicians. Though we use electricity in the diagnosis and treatment of disease, yet we are not electropaths, for

electropaths claim to treat all diseases by electricity alone. Though we use water in the treatment of diseases, yet we are not hydropaths, for hydropaths have a hobby that they can cure all diseases by the use of water alone. If we are partisan to scientific medicine, it is because we are partisan to the multiplication table, the laws of physics, chemistry and physiology, and it is to these sciences we look for progress in therapeutics and the management of diseases. Our field of study is one department of biology, hence a general knowledge of biology is of great value to the student. The physiologist studies life in its normal or healthy manifestations. The pathologist studies life in its diseased or abnormal manifestations. The particular field to which I invite you is that termed "The Principles and Practice of Medicine."

By the principles of medicine we mean general pathology, or perverted or diseased physiological action. In other words it is the unhealthy manifestation of life. By the term practice of medicine we mean special pathology, or the special unhealthy manifestations by which we discriminate diseases, learn the conditions which cause them, their symptoms, results and the best means of preventing and curing them. This large and practical field can only be entered through the avenues of the sciences. I said universal law prevails throughout the boundless extent of the universe, that the forces of all nature are correlative and convertible; but I did not say, nor do I now claim to follow, a theory of cure that conflicts with the teachings of physics, chemistry and physiology. We cure or care for our patients by changing the conditions that gave rise to or accompany the disease. These conditions may be external or physical, and internal or chemical. The external or physical conditions, classed under the head of hygiene, are of great importance in the treatment of disease, and are often more valuable than the internal or chemical conditions which are brought about by therapeutics or chemico-vital agencies. I have briefly indicated to you that health,

disease, the preservation of health and the cure of disease, are the products of external and internal conditions. These conditions are physical, chemical, chemico-vital and mental; and their laws are discussed in physics, chemistry, physiology and psychology. Hence the better your knowledge of these sciences, the better are you prepared to enter upon the study of disease and its treatment. If you have neglected these various branches of study, here are abundant opportunities to study them, and if you would succeed in the calling you have chosen you must give considerable attention to these fundamentals. Every advancement in these sciences is a help to progressive medicine. The sciences are all more or less dependent on one another, and progress in one department is progress for all. Hence, to keep abreast of the medical progress of this active age you must know something of those sciences upon which your your life-work rests, and also what progress is being made therein. The successful physician of the future must be, will be, a scientific man or woman; not that I would ask you to be able to calculate the path of a comet and the date of its return, to determine the tenacity of a bar of iron, or the elastic force of gases at high temperatures. But I would like you to know the general principles of these sciences, so that you will realize the magnitude of the field you are about to enter, and be able to comprehend the philosophy and logic of medicine. A knowledge of comparative anatomy and physiology will be of great service to you in the study of human anatomy and physiology; and if you have laid the foundations of your course deep in geology, paleontology, botany, chemistry and physics, your progress will be rapid and pleasant, and your success sure. Embryology, or the science of living embryo from the moment of conception to the day of its birth, the development of these various forms of life, not only through their prenatal existence, but up to full maturity, the manifestations of nervous action wherever found, and the laws of mind, known as the science of psychology,

each come in for a share. I do not expect you to master all these sciences in the short period of three years, for any one of them is work enough for a lifetime; nor do I expect you to learn all there is known of the principles and practice of medicine. But I do hope you will form such a love for the study of nature, and especially that part of it that pertains to your business, that wherever you go, or whatever you do, you will never lose sight of the fact that we, ourselves, are but parts of nature, from whose laws we are never exempt. The field of practical medicine is so large, and the work to be accomplished is so great, that you need all the broadening influence that a liberal, scientific education can give. I say liberal, scientific education, and by that I mean the practical application of the principles of the science. No person can learn anatomy from a book alone. He must go to the cadaver and learn it by practical dissection. No one can learn chemistry by reading a work on chemistry. He must go to the laboratory and do the work with the aid of the book. So in all other branches of science. And the same is true in our practical field, the application of remedies to the cure of disease. Therefore let no opportunity escape to see and examine for yourselves every case of disease that offers. Observe carefully everything pertaining to the case. Remember in detail every fact presented. Then study the case exhaustively by the aid of your authorities. In this way only will you make progress. To do this work properly and successfully you must bring to your aid, not only a trained mind, but a mind of broad and liberal views. This breadth of view is not to be attained by the study of history, polite literature or the ancient languages, but by the study of modern science. Do not understand me to disparage the study of the ancient classics, but do understand when I say that for the physician they are of comparatively little use, while a thorough knowledge of the fundamentals of the sciences is a far better preparation for his life-work.

I suppose you have all made careful preparation for the work you this day begin. If you have not, then you will find many difficulties, which only persistent endeavor can conquer. The practice of medicine is a field in which competition is very great; and would you be successful therein, you must have a thorough knowledge of your business. By far the greater portion of your business, as physicians, will be the treatment of diseases, or the practice of medicine, and this it is my province to present to you. To this end you must learn the nature of diseases, the anatomical changes, the physiological manifestations and the causes that induced them, learn to discriminate diseases from each other, learn their natural history when left to themselves, and their course under proper treatment, learn their sequelæ or results, and the best methods to prevent them and to cure them.

In the past history of medicine, as in the past history of philosophy, various systems have been taught, each built on some pet theory, or supposed action of remedies, or the *ipse dixit* of some great man. But the gigantic strides of scientific inquiry have left most of them so far behind that they only exist now as curiosities in medical history. Let me not be understood as arraigning the past for any shortcomings or errors in the methods adopted in medicine, or as claiming that better plans might have been followed or greater success attained. With the mental tendencies, the devotion to scholastic philosophies, the amount of learning and the degree of civilization which then prevailed, it was simply impossible that any condition of things could have obtained in medicine different from that which history discloses. So with the various "isms" and "pathies" of to-day. They cannot be other than they are from the very nature of things. Medicine was bred in the lap of ignorance and fed on the milk of superstition, and the result is that many of the children are hard to wean and do not take readily to the more hearty food of science. But, thanks to the inductive

method, first distinctly formulated by Bacon and called by him "The Interrogation and Interpretation of Nature," from his time on theoretical speculations and visionary dreamings had to give way to observation, which is the beginning of all knowledge and the basis of all intelligent action. But observation to be of value must be exact, and no preconceived notions, or habits of thought, or respect for authority, be allowed to prevent things being seen just as they are. At this juncture science brought forward appliances infinitely more precise than the unaided senses. Henceforth medicine has a right to rank as scientific; for, having taken her stand on the laws of physics, chemistry, anatomy and physiology, she proposes to abide by their advice and the progress which they make.

Disease is looked upon by many of the laity as an entity. It is true that an entity may be present as the cause of the disease, a parasite for instance; but while the parasite may be the cause, it is not the disease. Disease is deranged function, abnormal physiological action. Many of the laity think we treat diseases by giving a different medicine for every kind of disease, whereas we treat conditions, and the same condition may exist in many different diseases. We judge these cases by the objective and subjective symptoms presented. We choose our medicines by what we know of their physiological and chemico-vital action, when taken into the system. For instance, in anemia there is a diminished amount of iron in the system; hence we give iron to supply the deficiency by entering into chemico-vital relations with the blood corpuscles.

The laity have also many curious notions about the power of medicines and remedial measures, frequently ascribing to them supernatural powers and influences. I have known a member of Congress, who is a classical graduate with the degree of A. M., and a lawyer by profession, who continually carried a potato in his pocket to keep away the rheumatism. Very many just as foolish practices could be related did time permit, but I forbear. Col-

lege graduates and professors, lawyers, preachers, and even doctors of medicine, can be found who are very conscientious in their belief in just as foolish medical superstitions.

Another opinion prevails generally among the people, that the study of medicine makes the physician harsh, rough and hard-hearted. This is an error, for there is nothing in the study or practice of medicine that tends to cultivate any such characteristics. In former days, when the law expected men to understand anatomy, and compelled them to steal bodies for dissection in order to learn it, when anesthetics were unknown and the operator was obliged to work amid the screams and contortions of the patient, there may have been some reason for the popular idea. But, thanks to the liberality of our legislators and the progress of medical science, those days are past. The roughness and coarseness of Edinburgh's great Abernethy could not succeed at the present day as they did then; and his imitators find themselves left behind in the struggle for business. I trust the truth will be deeply impressed upon your memory that you have something else to cultivate besides a knowledge of disease and its cure by drugs alone. Can you not recall some of those days when the clouds covered the sky and the drizzling rain made everything damp, until every room in the old house seemed mouldy, dismal and cheerless, but by-and-by the clouds parted and the glorious sunlight came streaming in at the casement. You opened the shutters and let in the cheerful beams, scattering the darkness and dispelling the gloom, and how different the old room looked then. So the misfortunes of business and the loss of friends cloud the prospects and destroy the happiness of many hearts, laying the foundations for disease, and preventing the restoration to health. Now if you can come as a ray of sunshine to your patients' hearts in their deep afflictions, and with a soul of good cheer enter in and scatter the gloom, you will be possessed of one of the most essential qualifications for a

successful career. Therefore do not neglect to cultivate, while you are a student, that sweet disposition and those attractive qualities that will bring you friends when you come to active practice.

In conclusion let me say to you that hard labor is the price of success in this age of uncompromising competition. The never-give-up principle is invincible. Difficulties, mountain-like, that seem beyond your powers, diminish to mole-hills when you advance toward them firmly. Then let us to the work before us, and may the course this day begun be mutually pleasant and profitable.

ON THE INTERDEPENDENCE OF UTERINE AND RECTAL DISORDERS.

BY W. HUTSON FORD, M. D.

[*Read before the St. Louis Obstetrical and Gynecological Society, Sept. 20, '83.*]

APART from the usual observations upon the effect of uterine and ovarian prolapse, and of anterior and posterior displacements of the uterus, in embarrassing the functions of the rectum and favoring the development of hemorrhoids, very little is said in systematic works on the diseases of women with regard to the coincidence and interdependence of rectal and uterine disorders.

Scanzoni briefly notices the subject as follows: "The organs," says he, "situated in the neighborhood of a flexed womb almost always exhibit some change either in position or texture. Secondary affections of the rectum and of the bladder are the most frequent. Alterations also take place in the vascular system. Varicose dilatations of the hemorrhoidal and vesical veins are often met with, and the mucous membrane of the urethra, of the bladder and of the rectum present the anatomical charac-

teristics of chronic catarrh." When treating of "prolapsus uteri" he also remarks: "The bladder and the rectum are among the neighboring organs those which are the most deformed and displaced by prolapsus. The troubles of circulation caused by the deviations of the uterus extend also to these organs, where a hyperemia and a hypersecretion of the mucous membrane is often met with, and it is not rare to observe the varicose dilatation of the hemorrhoidal veins."

Other writers merely allude to the concurrence of rectocele with prolapsus, and of pain and difficulty of defecation (dyschezia), with retroversion.

Emmet insists upon the importance of rectal examination, to confirm impressions obtained by touch per vaginam, and to ascertain the condition of the rectum itself. "At the entrance," he says, "within a fold of the sphincter, an unsuspected fissure may be found, which by reflected irritation may cause irritability of the bladder and disturbance of the circulation in the pelvis, leading to dysmenorrhea, tenesmus, prolapse of the uterus, leucorrhea and congestion of the ovaries. All of these conditions I have been able to trace directly to the presence of an anal fissure, and relief has followed its cure. A fissure is always accompanied by obstinate constipation, a condition which if not relieved will, in consequence of the obstruction to the circulation which it causes, greatly retard the recovery of any case of uterine disease. The presence of a rectal polypus will also evoke a great deal of reflex irritation in the neighboring organs." Excepting in these remarks, and a word as to the dependence of vaginismus in some cases upon anal fissure, Emmet does not further allude to this subject in his work.

In his treatise upon the diseases of women (1874), Barnes observes that "vaginismus and dyspareuria may be occasioned by disease of the rectum, as fissure, or fistula, or inflamed piles." "Indeed," he says, "these reflected consequences are sometimes so much more extensive than

is the direct distress at the seat of mischief, that the true origin of the pain is apt to be overlooked." In his systematic work, this author does not treat of anal fissure, rectal ulceration, polypi, hemorrhoids, or chronic rectal congestion and rectitis, nor advert to these conditions except in the few words above quoted. He must have been fully impressed, nevertheless, with their importance in connection with uterine disorders, and has given full evidence of the fact in a very instructive lecture published in 1875 in the *London Lancet*, upon the Rectum and Anus in their relation to Uterine, Ovarian and Perimetric Diseases. In this lecture Barnes directs attention to the unity of the pelvic vascular system, which it may be well to describe very briefly:

"The uterine arteries are derived from two sources, the principal of these being the uterine branches from the internal iliac; the others proceed from the ovarian or spermatic arteries to the uterus, and are distributed upon it. The rectum receives a branch called the middle hemorrhoidal from the internal iliac, and the inferior hemorrhoidal from the internal pudic. The superior hemorrhoidal arteries are branches of the inferior mesenteric, near the sphincter, anastomosing with the middle hemorrhoidals. 'The rectum,' continues Cruveilhier, 'exceeds all other parts of the large intestine in the number and size of its arteries.' A large share of the arterial supply to the rectum and uterus is thus derived from the same primary trunks, but it is especially in the venous circulation that the vascular community of the pelvic organs is established. 'The vesical or vesico-urethral plexus of the female is less developed,' says Cruveilhier, 'for obvious anatomical reasons, but communicates very freely with the vaginal plexus behind. This vaginal plexus is a vascular net-work extremely well developed, especially opposite the orifice of the vulva, which is entirely surrounded by it with several series of circular anastomosing veins; it communicates with the vesical

plexus in front, and with the hemorrhoidal plexus behind, so that all the plexuses in the pelvis are involved in the state of turgescence which accompanies the phenomenon of erection in the female. The veins contained in the substance of the uterus do not present any trace of the tortuous arrangement of the corresponding arteries. The uterine veins, like the uterine arteries, are found along the sides and upper angles of the organ. Opening into these veins are found larger venous canals, which run from side to side through the substance of the uterus and anastomose frequently with each other. These venous sinuses, furrowed out in the thickness of the uterine tissue, are not contractile; they do not open into the uterine veins alone. Several of them terminate in the ovarian veins (pampiniform plexus), which communicate freely with the uterine, and may, if necessary, supply their place.'"—(Cruveilhier.)

The hemorrhoidal veins and plexuses, very scant of valves, surround the lower end of the rectum. They are formed by the superior hemorrhoidal branches of the inferior mesenteric vein, and by the middle and inferior hemorrhoidal branches of the internal iliac vein. (Cruveilhier, Gray and Wilson.) The submucous venous net-work near the anus forms a plexus whose vessels are liable to become varicose, a condition which constitutes the greater number of hemorrhoidal tumors.

All these plexuses are in free communication with each other, and by means of the middle hemorrhoidal veins with the internal iliac vein. The superior hemorrhoidal veins inosculate very freely with the middle and inferior, and pour their contents into the inferior mesenteric vein, one of the four main venous trunks constituting the portal system. By this channel the system of the vena portæ is in continuity with the general circulation, so that injections pushed by the inferior vena cava, says Cruveilheir, always enter in part into the veins of the portal system. The pathological significance of this intercommunication has been thoroughly studied.

"This anastomosis and unity of the pelvic vascular system," says Barnes, "is such that engorgement or inflammation of the uterus cannot fail to cause increased afflux of blood and hemostasis in other pelvic organs. To this increased flow of blood there is necessarily added the mechanical effect of increased weight and bulk. These two conditions already combine to cause accumulation of blood in the hemorrhoidal vessels. A third condition is rarely wanting long. This is displacement of the uterus. The prolapsus consequent upon increased weight of the uterus and the relaxation of the supporting structures brings a further aggravation of pressure to bear upon the rectum just above the anus, increasing the difficulty under which the hemorrhoidal vessels labor in unloading themselves."

The pelvic veins of the two sides of the body communicate freely with each other, and are provided with a great number of valves, except the hemorrhoidal, which are nearly devoid of them. Whatever tends to cause undue fulness of any of the venous plexuses of the pelvis also affects all the rest directly, in consequence of the free anastomosis everywhere existing.

Some special conditions still further render undue venous turgidity possible and easy in the veins of the pelvis. Among these we may notice the absence of fixed support offered by contiguous bony structures, the infrequent contraction of the muscles among and around which these veins are distributed, the communication of the pelvic venous system with that of the vena portæ by the way of the inferior mesenteric veins and superior hemorrhoidal plexus, and the position of these veins at the lowest portion of the trunk.

The normal caliber of the pelvic veins, like those of the entire abdominal cavity, is maintained by the pressure of the diaphragm and abdominal muscles against the muscular, fascial and bony parietes of the pelvis. The vena portæ and its four great derivative trunks, and their

branches, are entirely destitute of valves. The contents of the abdominal cavity are liable to large variations in quantity; and the degree of support afforded to its veins and antagonism to the muscles which surround it, as these contents are purely fluid or more or less elastic from the presence of gases, is constantly varying. Unchangeable, fixed points, against which the veins may be pressed during muscular action, like the bones of the skeleton or even the blood in the heart, are absent throughout the abdominal cavity. In the body at large, the elasticity of the skin, and the frequently repeated pressure of the contracting muscles against each other and against subjacent bones, are main factors in the propulsion of the venous blood. Every contracting muscle which can efficiently compress a vein coursing between itself and a neighboring muscle, lying between it and a bone or tunneling its substance, is *pro tanto*, as Weir Mitchell expresses it, a throbbing heart. For the proper propulsion of the blood by this mechanism a uniformly firm and unyielding counter-resistance is indispensable. The tonic contraction of the hollow organs of the pelvis approximates their walls, and to that extent aids in supporting the veins distributed through them; but from the function of these organs as reservoirs relaxation is inevitable, while their contraction is so infrequent, as compared with the voluntary or respiratory muscles, that it can not be practically regarded as in any notable degree facilitating the emptying of the venous plexuses. These pelvic veins, in man, on account of his erect posture, and the absence of any valves whatever from the heart down to the internal iliac and inferior mesenteric veins, are continually subjected to a pressure of about twelve ounces avoirdupois to the square inch of internal surface. To counteract this pressure, we have only the strength of the venous walls themselves, and the unreliable and varying support of the tonic contractions of the muscular pelvic structures, and an intra-abdominal pressure continually fluctuating with the character of the abdom-

inal contents, at every respiration and under all changes of tension due to muscular action.

In consequence of these physiological and anatomical causes, a natural tendency seems to exist towards weakening dilatation and varicosity of the pelvic veins, to stagnation of blood in the parts which they drain, and to a textural irritability of these parts easily exaggerated into inflammation. This disposition is undoubtedly augmented by continued maintenance of erect postures of the trunk, as in walking or riding, or standing long without locomotion. Here we recognize the influence of the columnar blood-pressure already mentioned. The sitting posture, moreover, when long continued, in which relaxation of the abdominal muscles to a great extent coincides with the vertical position, is admitted on all hands to be peculiarly efficient in causing hemorrhoidal conditions of the rectum. Insufficient exercise, combined with full diet, indulgence in highly nutritive or stimulating food and drink, and neglect of the function of defecation, are also acknowledged causes of these venectatic conditions in the rectum, and they should be similarly active to nearly as great an extent in the other pelvic organs. General experience will, I think, bear out the assertion, that hepatic and portal obstructions due to chronic malarial intoxication, or other systemic causes which obstruct the passage of the blood through the portal capillaries, especially where constipation or irregular diarrhea coexists, are fertile causes of pelvic venous repletion and rectal varicosity, notwithstanding the more or less emphatic dissentient expressions of Allingham, Quain, Gay and Grisolle. I am also strongly inclined to believe that pulmonary and cardiac obstructions, asthenia, bronchiectasis, valvular heart disease, pleuritic effusions, and even tight lacing and other mechanical hindrances to a return of the blood from below, favor and in time may produce venous fulness in the pelvis, and beget inflammatory conditions in all or any of the pelvic organs. So far as the rectum is con-

cerned, the constant irritation of unexpelled feces in the bowel, and the accompanying loss of support to the rectal veins due to continual dilatation of the rectal cavity, phenomena characterizing chronic constipation, are observable in nearly all cases of hemorrhoids, and effectively induce a dilatation of the hemorrhoidal veins, which either sympathetically or by anatomical continuity, as well as in other ways, involve the vaginal, uterine and pampiniform plexuses. It must be recollected also that habits of life and systemic conditions of the kind described necessarily entail denutrition of the connective tissues, and so diminish the tensile strength of the venous walls.

This condition of vascular turgidity existing in the pelvis, displacement of the uterus adds still more to the circulatory disturbance by strangulating the uterine circulation, so that the womb is increased in weight and caused to descend progressively in the pelvis.

Ultimately, retroversion in the majority of cases (some recent statistics turn the scale in the opposite direction), or varying grades of anteversion with flexion, complicates the prolapse. In either case the rectum is directly invaded by the displaced uterus. If retroversion exists, the uterine fundus is wedged down between the utero-sacral ligaments into the hollow of the sacrum, and the rectum perpetually irritated by pressure and congested by the interruption offered to the return of its venous blood. If anteversion coincide with prolapse, the cervix is thrust sharply down against the recto-vaginal septum, through which it presses against the lower part of the rectal cavity. This it unceasingly chafes and dilates in every respiratory or other movement, becoming itself swollen and exquisitely painful. Obstruction by retroversion involves dilatation of the parts above as well as below the point obstructed, by preventing the complete evacuation of the rectum. Fecal accumulation so induced still further impedes the rectal circulation by distension, and by local irritation sooner or later leads to subacute rectitis. Absolute ulceration may or may not

supervene; a general venectatic condition may ensue, or, if other conditions concur, true hemorrhoids may be developed. It is common, however, in these cases, to observe a highly inflammatory condition of the rectum, as shown by redness, the presence of superabundant mucus and glairy lymph adherent to the mucous membrane, a disposition to bleed on the slightest touch, and increased heat. Very often we notice ulcerated areas above the inner sphincter, mostly on the sides or coccygeal aspect of the bowel. We generally also observe a sacculated condition of the rectal cavity, in varying degrees, up to a point at which the bowel has utterly lost its contractility.

As this condition of the rectum is developed, another factor is introduced, aggravating the difficulties already present; this is the preternatural contractility of the sphincter ani of Brodie, sphincterismus, the reflex consequence of the irritation of the rectal cavity. When established, defecation is rendered still more difficult, the mere presence of fecal matter in the rectum so irritating its congested walls as to cause the sphincter to oppose more or less effectively the expulsive efforts of the intestine, aided by the muscular contractions of the diaphragm and abdominal muscles. Defecation is incomplete and difficult. Fecal matter unexpelled hardens into scybalous masses, which add to the rectal irritation and by distending the bowel just above the inner sphincter separate its walls, and so maintain and aggravate the pre-existing venous turgescence. Owing to the difficulty of defecation, the function is neglected and the bowel unloaded as seldom as possible. When this is eventually done, large hardened masses of feces, violently driven through the contracted orifice, lacerate the mucous membrane around the inner or outer edges of the sphincter, and the rent or fissure so made by constant irritation and occasional stretching becomes a little ulcer. In the base of this ulcer, which eventually involves the entire thickness of the mucous membrane, are exposed some of the hypertrophied

and exceedingly hyperesthetic filaments of the nerves from the sacral and hypogastric plexus abundantly distributed in this neighborhood, whose irritation occasions constant pain, and suffering after defecation, often amounting to prolonged agony. The suffering attendant upon these ulcerations constitutes an irresistible incentive to a neglect of the defecatory function through dread of the pain it causes, and the habit of constipation so acquired leads to retention in the colon, the formation of hardened accumulations, distension, systemic depravation by absorbed excrementitious products, copremia, and a propagation of the rectal inflammation to areas of the large intestine higher up.

In the end, we find in most of these cases of uterine prolapse, with version backward or forwards, a general hemorrhoidal disposition of the rectum, chronic rectitis, and one or more fissures just within or without the sphincter, or upon the sphincter itself, coinciding in their longer axis with the direction of the rectal cavity. Sphincterismus obstructs digital examination, and the finger falls upon a tender cervix plugging the inner orifice of the rectal opening, or on the uterine fundus somewhat above, impacted in the sacral concavity. In several cases of this kind, where anteversion has existed with prolapse, I have found a defective antero-posterior pelvic diameter, coinciding with a shallow pelvis, so that the uterus evidently hung too low even before the occurrence of true procidence, the cervix resting into a funnel-shaped concavity corresponding to the site of the internal sphincter. Anteversion occurring in such a case is sure to cause rectal irritation, and the condition is far more difficult of alleviation and cure than in a pelvis of proper dimensions. In the cases of this kind falling under my notice exaggerated vaginismus existed totally forbidding sexual intercourse, as a result of the rectal irritation and tenderness and the reflex influence of the associated fissures. In one case the influence of saturnine intoxication, to which attention has

been directed as a cause of vaginismus by Neftel, of New York, was superadded. The efficiency of this cause of vaginismus seems to me to be very probably attributable to the chronic hepatic torpor and obstinate constipation, with their ultimate effects, rectitis, sphincterismus and fissure, well known to be attendant upon lead-poisoning.

On the other hand, irritations primarily rectal may induce uterine and ovarian disease by maintaining turgescence of the pelvic veins and inviting direct determinations of blood. The constipation so constantly attendant upon diseases of the rectum is of itself adequate to excite uterine disorder. The associated turgidity of the vessels in time invades the uterus, broad ligaments and vagina. Hemostasis begets relaxation and atony of the sustaining structures by denutrition. Interference with the proper uterine circulation necessarily ensues, congestion follows, of a passive character, with atonic enlargement and increased weight. In time versions and flexions appear, obstructions of the uterine canal, cervicitis, cystic degeneration of the cervical mucous membrane, more or less stenosis near the inner os, partial retention of uterine discharges, and eventually endometritis. Vaginal irritability succeeds with leucorrhea, and the bladder becomes sympathetically irritable. "Hemorrhoids, fissures and ulcers of the rectum and anus," says Barnes, "may be primary, or at least exist independently of uterine disease or displacement. The symptoms they give rise to may be taken by the patient, and in the first instance by the medical attendant, as evidences of uterine disease. And disease of the rectum, if involving much congestion and pain, and difficulty in the perfomance of its functions by the consequent accumulations and straining, may produce congestion and prolapse of the uterus. Hence, as in the converse case, the morbid condition of each organ exerts a vicious influence upon the other."

The uterus, vagina and even the bladder may be mechanically irritated by rectal tumors, and conversely. In the male sex this point is under continual observation. All af-

fections of the bladder, prostate, and membranous urethra are aggravated, and some of them directly caused, by circulatory, nervous, and mechanical disturbances due to the existence of piles, polypi, hardened fecal masses or ulcerations in the rectum, or seated near its orifice. So well is this understood, that it is axiomatic in the treatment of genito-urinary affections in the male sex, that all such abnormal conditions of the rectum and anus, whether primary or secondary, must be abated before a cure can be realized.

[CONCLUDED IN DECEMBER COURIER.]

ALCOHOL IN THE TREATMENT OF DISEASE.

BY J. W. COMPTON, M. D., EVANSVILLE, IND.

[*Read before the Vanderburgh County Medical Society.*]

IT is not to alcohol as a beverage that the remarks I shall make are directed; nor from any temperance standpoint shall I attempt to discuss the subject, but endeavor to show that much good may come from the proper use of a remedy so full of evil results when injudiciously administered or indulged in.

I shall only have time to give a few of the general principles upon which its virtues as a therapeutic agent depend.

Dr. T. Lauder Brunton, in three short paragraphs, ably elucidates its physiological action on the human body:

"1st. Alcohol in small quantities increases the secretion of gastric juice and the movements of the stomach, and thus aids digestion; although unnecessary to health, it is useful in exhaustion and debility.

2nd. It increases the force and frequency of the pulse, by acting reflexly through the nerves of the stomach.

3rd. After absorption into the blood, it lessens the oxid-

izing power of the red corpuscles. This property renders it useful in reducing temperature. When constantly or very frequently present in the blood it causes accumulations of fat and fatty degeneration of organs."

I will first call attention to alcohol as a reliable agent in reducing temperature, so greatly to be desired in inflammatory and wasting diseases. Prior to the introduction of the clinical thermometer, it was claimed and almost universally believed that alcohol was a powerful heat generating agent, and was freely indulged in as a protection against cold. The thermometer has demonstrated that it has no heat generating properties, but on the contrary, as soon as a quantity sufficient has been taken to produce any change whatever, it is found that the temperature is reduced. "From animals suffering from pyemic fever, Bouvier and subsequent observers have found that alcohol exerts a decided antipyretic action—very large doses of it lowering the temperature as much as 8½° C., and altogether preventing the occurrence of fever, if narcosis be produced before the development of the latter." (H. C. Wood). From this antipyretic property of alcohol we derive much of its therapeutic value.

I will now call attention to some of the diseases and conditions in which the failure of the heart's action calls for the prompt and persistent employment of stimulants. In the pernicious malarial fevers, malignant scarlet fever, typhoid fever, cholera, erysipelas, various poisons, particularly the poison of venemous serpents, the secretions become so much depraved, so malignantly putrescent as to poison the blood.

The poisoned blood in turn is conveyed to the brain and poisons that organ. The brain being the great battery that through the nerve lines supplies nervous energy to all the involuntary muscles and organs, the heart may, by failing to receive its accustomed stimulant, become so paralyzed in its action as to fail to supply the system with the necessary amount of blood, and inevitable death, unless prompt and efficient remedies be applied, will be the consequence.

"The experimental evidence seems to confirm the clinically known fact that alcohol in moderate amounts powerfully stimulates the heart and circulation." (H. C. Wood).

By dilating the blood-vessels of the skin it warms the surface and produces a more equitable distribution of heat, relieves congestion in internal organs by inviting the engorged blood away from them to the surface, as evidenced by the glow which mantles the cheeks and the warmth which may be found to extend to the extremities.

Without entering into any discussion of the different modes by which death may approach in disease, the failure of the heart's action may be classed among the most important.

Dr. Watson has said that life rests upon a tripod, whose three vital supports are the heart, the brain, and the lungs.

"The mode of death may begin at any one of these."

The stimulus of blood may be sufficient, but the contractile powers of the organ may fail; many diseases which are due to morbid poisons in the blood tend to prove fatal by this mode of dying.

The approaching danger in this condition, the physician may readily detect by the pulse becoming wiry, feeble and frequent, and if remedies be not applied there will be ultimate failure to perceive pulsation of the radial artery at the wrist.

Preparations of alcohol properly administered excite and stimulate the cerebro-spinal system of nerves, and through these other parts of the system—stimulate the heart to increased action, render the pulse full, give additional energy to the relaxed muscles, and exaltation and energy to the mental faculties; promote digestion, absorption, assimilation, and consequently sanguification, by causing a more thorough appropriation of food to nutrition—the saving thus effected more than counter-balancing the waste of tissues implied by increased vital action.

The relation of a few cases which occurred in my prac-

tice will convey to the society a more satisfactory idea of the beneficial results to be obtained from the judicious administration of alcoholic stimulants than would a greater amount of space taken up in theorizing on the subject.

H. B., aged ten years, was taken with scarlatina, with moderately high fever and the appearance of profuse scarlet eruption, on the second day, covering the entire body; with considerable soreness of the throat and deep redness of the fauces.

The usual remedies were prescribed, and the disease appeared to be running a favorable course until the night of the fourth day, when the patient became exceedingly restless. The eruption commenced to assume a dark hue, and the disease passed, almost by imperceptible gradations, into a quite malignant form, septic and typhoid in character. The temperature was high, the secretions had become vitiated and tenacious, and sordes had collected about the mouth and teeth.

Incoherent raving was succeeded by stupor, and by the afternoon of the fifth day the pulse was wiry, feeble, and frequent, the respiration short, quick, and oppressed, the eyes were turned upward, and the urine suppressed. The indications were strong that death would occur during the following night.

The delirium and stupor occurring in such rapid succession showed that vitiated secretions had poisoned the blood, and this had poisoned the brain; the failing and feeble pulse indicated that there was a manifest failure of the heart's action, and a combination of such unfavorable symptoms was present that death appeared inevitable unless active interference should result in marked improvement.

The prescription for the night was a teaspoonful of whiskey in a tablespoonful of sweet milk every hour, together with carbonate of ammonia and quinia at longer intervals.

The patient was fortunately in the hands of nurses who

had no preconceived opinions or ready excuses for substituting their own judgment for that of the physician. The medicines were given with the strictest punctuality, in accordance with the prescription. The result exceeded the most sanguine expectation.

At nine o'clock, on the morning of the sixth day, the little patient had returned to consciousness—a life was saved. A few days continuance of the stimulants, and the case was bridged over the dangerous period of the disease, and convalescence fully established.

SECOND CASE.—P. F., aged 18 years, of strumous diathesis, with posterior curvature of the spine, a hunchback of the most marked type—the deformity of chest greatly compressing the lungs and diminishing the breathing capacity—was attacked with double pneumonia on the night of the 8th of March, ushered in by chill and followed, when seen in the morning of the ninth, by intensely high febrile excitement, with flushed cheeks, severe pain in left side, constant cough, viscid, bloody pneumonic expectoration, hurried breathing and rapid circulation.

By the fifth day general hepatization had taken place. Respiration sixty to the minute, with pulse so rapid as to make it impossible to count with accuracy, lips and face cyanozed, temperature 105°. Prognosis decidedly unfavorable.

Up to this time she had taken liberal doses of quinine, with expectorants and opiates, with carb. ammon. and with fomentations to the chest. The chances for recovery were now almost hopeless and the relatives so informed. Depressing expectorants were now discontinued. Quinine given at longer intervals and tablespoonful doses of whiskey in half a teacupful of milk administered every two hours, with ten-grain doses of Dover's powders at night and repeated as often as necessary to secure sleep.

On the morning of the sixth day there was marked improvement—respiration 35, pulse 120, expectoration comparatively easy.

Treatment was continued and the patient went on to a favorable and rather rapid recovery. The following case, which I consider a good representative one, was furnished me by Dr. W. D. Neel—my relation to the case being that of consulting physician:

W. C., aged 15 years, with third attack of pneumonia, all of the right lung. May 2nd, congestion of lungs with malarial complications—temperature 102°. Ordered cathartic and five-grain doses of quinine every three hours. May 3d, temperature 102½°, hot fomentations to chest; quinine continued with the addition of expectorants.

May 4th, temperature 104½°, treatment continued. May 5th, afternoon, temperature 105°, respiration 56, pulse feeble and frequent; ordered carb. ammon. in syrup and twenty-grain doses nitrate potass.

Was called again at midnight—little or no change, except that respiration was more labored. Ordered tablespoonful doses of whiskey every hour until three doses were taken, and then to be continued every two hours.

I will state here that at this midnight consultation the pulse was feeble and frequent, almost imperceptible, respiration so labored and rapid as to be exhausting to the patient—the symptoms, indeed, so unfavorable that, when asked by the attending physician if I would meet him in the morning, I replied that it would be unnecessary, as the patient would either be dead by morning, or so much better that he would need no consultation.

Dr. Neel visited the patient next morning, and continued, as follows, the history of the case in substance:—May 6th, 9 A. M., temperature had fallen to 102°. Whiskey continued every two hours, with ten-gr. doses Dover's powders to secure rest; 9 A. M., same day, temperature 102½°. May 7th, 8 A. M., temperature 101½°, whiskey and quinine continued; 11 P. M., same day, temperature 101°, resting well, respiration 48, pulse 86 and good; ordered less whiskey, and patient rested during the night. May 8th, 11 A. M., temperature 102¼°, respiration 54; whiskey had been

dropped nearly altogether because patient refused to take it; 11 P. M., same day, respiration 50, lips purple and circulation weak; ordered whiskey in tablespoonful doses every hour in milk. May 9th, 10 A. M., temperature 100¾°, respiration 48, circulation good; whiskey every two hours.

Further details of this case were not kept, except to say that the case progressed favorably, and at this writing, May 20th, patient is convalescent.

It is not claimed in this paper that a new treatment has been instituted, but it is claimed that the good results are largely due to the systematic administration of the remedy at short and regular intervals, and in definite quantities as other medicines are administered.

FRACTURES OF THE LONG BONES OF THE LOWER EXTREMITY.

By W. C. Day, M. D., Winchester, Ill.

[*Read before the Medical and Surgical Society of Western Illinois, at Carrollton, Ills., November 14th, 1882.*]

THE treatment of fractures is one of the common duties of the surgeon, and every practitioner away from the large centers of population must acquire proficiency in this branch of surgery, if he expects to be successful.

In the treatment of fractures, the surgeon must not regard the rent in the bone as the only structure that deserves his watchful care, and think its reparation is to be effected as a carpenter would splice a broken beam. Of equal importance are the soft structures, such as the skin, cellular tissue, muscles, nerves and blood vessels, and his vigilant attention is required to preserve their integrity.

The surgeon should not display too much partiality for one kind of splint for all cases, but should out of the

multiplicity of material usually at his command select or construct such implements as will be best suited to his case. Ready-made splints, as usually produced by the instrument manufacturer, are nearly always inadequate. The application of these would involve the necessity of selecting the patient to fit the splint, instead of making the splint fit the patient. Materials of which to construct splints are almost universally accessible, and need cost but a trifle. Small, thin boards, bundles of twigs or straw, pasteboards, the bark of trees, tin, leather, plaster of Paris, glue, small iron rods, cotton cloth, batting, etc. Out of such materials the surgeon should select the articles he needs, and construct such splints as the exigencies of his case require.

My subject includes only fractures of the femur, tibia and fibula. The femur may be severed in any portion of its continuity, but for the purpose of description it will be simply necessary to divide it into fractions of the shaft, upper and lower extremities.

The majority of our old text books dwell elaborately upon extra- and intra-capsular fractures, and their differential diagnosis—facts which embrace points of great practical importance, but the distinctions are very confusing, and most of modern and classical authors now regard the terms as obsolete.

Prof. H. J. Bigelow (than whom there is no better authority on surgical injuries of the hip joint) says:

"The sooner the old classification of intra- and extra-capsular fractures is abandoned, the better it will be for science, for diagnosis, and for treatment."

Upon injuries of the upper extremity of the femur this eminent author further says:

"Apart from dislocation, the main object of examination is, to decide with reference to treatment, whether a fracture is loose or impacted.

"Prolonged and active flexion, and rotation of the hip in search of positive signs is more than superfluous.

"The most useless and damaging examination is by

quick and persistent rotation, and by flexing the thigh as far as a right angle. The points to be determined are: 1st, the degree of shortening; 2nd, whether the shaft rotates on its axis, or through an arc."

His classification of these fractures seems the most simple and easily comprehended of any I have seen, which is in brief:

"CLASS I.—Impacted fractures. 1st. Posterior impacted fracture of the base of the cervix, the most common of the fractures of the neck of the thigh bone, symptoms shortening and eversion slight. 2nd. Impacted fracture of the neck of the femur—rare. 3rd. Impacted fracture of the whole base of the cervix, with inversion.

"CLASS II.—Unimpacted fractures. 1st. Fracture of the small parts of the cervix, much shortening, marked eversion and rotation of the shaft upon its axis, instead of through an arc. 2nd. Comminuted fracture of the trochanters and shaft."

It might seem easy to differentiate a fracture of the hip joint from a dislocation. Authors inform us, that in injuries of the hip-joint, in patients above the age of fifty years, we may expect fracture instead of dislocation. This is liable to mislead, and has no doubt caused dislocation to be often overlooked.

In this connection I will digress and give the details of a case that came under my observation, in which such a mistake was made.

J. W., male, aged 70 years, residence Scottville, Ill., in the fall of 1877, on alighting from a wagon, stepped over the rim of the wheel on to the hub; in assuming the erect attitude his foot slipped, throwing his body backward with the upper part of the thigh against the rim of the wheel, and producing a dislocation of the head of the femur forward upon the pubis.

The attending physician supposed it to be a fracture of the neck and treated it as such for eight weeks, when, to his dismay, he discovered that it was a dislocation. After fruitless attempts to reduce it by mechanical appliances, the case was abandoned by the doctor, with the gloomy prog-

nosis that nothing further could be done. The decision being unsatisfactory to the patient, Dr. Kinkead and I were summoned.

We made heroic efforts to reduce the dislocation. Although I cannot say we failed, yet at the point where we expected our efforts to be crowned with success we were chagrined to hear an audible snap, which announced the unmistakable breaking of the bone through the neck of the femur. Being convinced that we then had a fracture, we placed the limb in the Hodgen wire suspension splint, and kept it under treatment for twelve weeks, when, to our gratification, we found that the bone had united by ossific union, and with so vast an amount of callus and adhesions to its pelvic attachment that the old gentleman arose with a comparatively strong limb, upon which he could walk, and has walked ever since—now five years—a monument to scientific blundering in surgery.

All impacted fractures of the neck and head of the femur should be treated without extension, in order not to disturb the fragments.

Splints of plaster of Paris, or shellaced felt, may be moulded over the hip and confined by the roller; or sandbags may be placed about the hip and limb to steady it and prevent motion of fragments.

These fractures usually occur in the aged, and if bodily vigor fails them, by confinement in the recumbent position, it will be best to have them get up on crutches, after splinting the injured parts and suspending the limb by a sling from the neck around the hollow of the foot.

Fractures of the lower end of the femur, near the condyles, is best treated in the flexed position. In this fracture the lower fragment is powerfully acted upon by the gastrocnemius, plantaris and popliteus muscles, thereby flexing the knee-joint, even when the leg is extended, by the powerful contraction of these muscles. If this fracture were treated with the limb in perfect extension, it is not probable that the bone would ever unite; hence the

limb should be treated on a double inclined plane, for in this position only can we expect union of the bone.

For fracture of the lower end of the fibula and tibia, near the ankle-joint, a splint made of plaster of Paris is doubtless the best. If the fracture should be compound, we can still meet the emergency by making a fenestrum in the splint, over the laceration in the soft parts.

Let us now consider the treatment of fractures of the shafts of the femur, tibia and fibula, also unimpacted fractures of the neck and trochanters of the thigh-bone. Much has been written pertaining to the different directions a fracture takes—line of fracture, varieties, etc. The three principal varieties are transverse, oblique, irregular or dentated—practically there are but two, transverse and oblique.

It may appear parodoxical when I assert that there are no *transverse* fractures of the shafts of long bones, and probably never *were*, although asserted to exist by a great many writers. Cruveilhier says "it is impossible." Camper and Malgaigne were not able to find a single specimen of the kind in all the museums of Holland, Germany, England and France; and the latter failed to produce this kind of fracture in the dead body. Hence it is a fact now settled by the best authority that all fractures of the shafts of the long bones are either oblique, irregular, or dentated. All fractures then of long bones being of these varieties, the question naturally suggests itself, what is the *cause* of displacement and shortening? Undoubtedly muscular contraction. And, again, how are we to prevent shortening and displacement during the repair of fractured bone?

This question has engaged the attention of the best medical intellects of all ages known to written history.

Primitive methods and appliances were rude, but improved and modified as they were handed down from age to age, moulded by each in turn, growing richer and more elaborate in perfection by time; so that the vast experiences of the past as brought down to us have evolved into grand results approaching perfection.

It was left to the genius of the late Dr. Hodgen to catch the inspiration and combine the principles of Buck's extension, with Smith's suspension, into a perfect, practical plan—utilizing their principles, but constructing a splint on a different design from anything ever produced before. This splint is the implement *par excellence* for the treatment of fractures of the shafts of long bones of the lower extremity, also the unimpacted fractures of the neck, and trochanters of the femur.

It is an indisputable fact that shortening in oblique fractures is caused by muscular contractility; and further, contracted muscles can not be readily overcome and made to relax by force suddenly applied in the living, unanesthetized subject. A fact equally potent is that contracted muscles can readily be made to yield by force, equally, evenly and continuously applied. Hence, extension by means of gravitation can be made the positive and exact antagonist of muscular contraction.

Hodgen's splint both combines and utilizes all the principles above enumerated to the fullest extent. It suspends the limb, thereby contributing to the comfort of the patient. The force of gravitation is applied by the obliquity of the cord suspending the limb. By varying the degrees of its obliquity, a force can be evenly, equally and continuously applied to the contracted muscles, so as to antagonize them completely, thereby allowing the fractured edges of the bone to come into and remain in apposition; and if this force is constantly and efficiently kept up, there will be no shortening of the limb.

Recent statistics establish the fact that there is less shortening by this than any other known method.

Notwithstanding that English surgeons have been loath to extend to American genius any praise, nevertheless we have the unqualified endorsement of Dr. Hodgen's splint by the distinguished surgeon Mr. Cooper Foster (Guy's Hospital Report, 1876), who says that "it is theoretically the most perfect splint that was ever devised."

Dr. Hodgen's method of treating fractures has attained a signal popularity in England. The above named surgeon states that he has treated twelve fractures with this splint, and with results far superior to any other known method.

I have treated fractures of the leg with this splint for eighteen years, and without observable shortening in nearly every case.

PRELIMINARY EDUCATION.—The records of the Illinois State Board of Health show that graduates of reputable medical colleges have spelled the word "diploma" in seven different ways incorrectly, as follows: diaploma, diplomy, diplomer, diplomah, diaplemy, diapluma, dipluma.—*Ohic. Med. Jour. & Ex.*, Sept., '83.

INCREASE AND MULTIPLY.—The *Madrid Estafette* is responsible for the following statement:—Señor Lucas Nequeiras Saez went to America seventy years ago. He married three times. His first wife bore eleven children at seven births, the second bore nineteen children at thirteen births, and the third had seven children at six births. Twenty-three of these children were sons, and all are living. Thirteen are married, six unmarried and four are widowers. Nine of the living daughters are married. The youngest of the thirty-seven children is nineteen years old; the oldest is seventy years old and has seventeen children, the first-born being forty-seven years old. There are thirty-four granddaughters, of whom twenty-two are married, nine unmarried and three widows. The grandsons number forty-five, of whom twenty-three are married, seventeen are unmarried and four are widowers. Forty-five great-granddaughters and thirty-nine great-grandsons make eighty-four representatives of the fourth generation. It is stated further that Señor Saez has recently taken back to Spain, in one of his own ships, all the living members of the family, one hundred and ninety-seven in all.

CASES FROM PRACTICE.

ST. LOUIS HOSPITAL, SURGICAL DEPARTMENT.

Service of DR. E. H. GREGORY.—Reported by PAUL Y. TUPPER, M. D.

CASE II.—LITHOTOMY.

J. B——, American, aged 34, married, farmer, of delicate appearance, entered Aug. 29th.

History.—When between five and six years of age had an attack of scarlet fever. Renal sequelæ causing general dropsy and bloody urine. Great pain on micturition at this time. For about twenty years there was a subsidence of all symptoms indicating renal or vesical disease. Was then treated for about ten years for what was diagnosed as cystitis, passing from acute into a chronic form. Bladder intolerant of urine most of the time.

Within the past two months strength has failed greatly. Gives evidence in his appearance of having suffered much. Bowels irregular. Has to void urine about every hour and a half, and can only do so when lying upon back. At times bowels are moved in effort to empty bladder.

Temp., 101¼° F.; pulse, 88, soft and good.

Diagnosis.—Vesical calculus.

Ordered dose castor oil, and after bowels had moved, elix. opii (McMunn's), gtt. xv, every three hours. Milk diet.

Aug. 30th.—Temp., 99⅘°; pulse, 84. Bowels moved freely Condition improved since yesterday.

Operation.—Ether. An attempt was first made to crush stone with lithotrite, but was rendered futile by exceedingly small size of bladder and the largeness of the stone—the latter filling the viscus completely. Putting patient in the lithotomy position, the left lateral perineal section was made, and the

bladder entered on the staff. The calculus, which was phosphatic, was readily crushed and removed through the incision. Bladder thoroughly washed out with douche.

Ordered quiniæ sulph., grs. x, three times daily. McMunn's elixir, gtt. xx, every two hours. Continue fluid diet.

Aug. 31st.—Temp., 100⅘°; pulse, 88, and of good character. Passed good night. Perspired freely. Looks better since operation. Urine passes entirely through incision. No pain. Continue.

Sept. 1.—Temperature and pulse normal. Bright and cheerful. No pain.

Reduce quinia to grs. v, three times daily. Continue opium and diet.

Sept. 2nd.—Doing well. Discontinue opium unless pain. More liberal diet.

Sept. 3.—Condition good. Temperature and pulse remain normal. Vomited breakfast because stomach overloaded. Urine flows entirely through incision.

Sept. 4th.—Doing well.

Sept. 5th.—Temp., 99⅘°; pulse, 80. Continue quinia.

Sept. 6th.—Temp., 99⅘°; pulse, 80. Vomited dinner yesterday. Feels well to day. Continues free from pain.

Sept. 7th.—Temp., 100½°; pulse, 84. Bowels inclined to be loose. No more vomiting.

Ordered fluid diet.

Sept. 8th.—Temp., 100½; pulse, 88. Bowels still loose. Felt chilly this morning. Slight spasm of bladder occasionally. Wound granulating.

Ordered

℞. Acidi sulph. aromat.,
Tr. opii camph.,
Syr. rhei, - - - - - - āā ℥ss.

Misce. Sig. Teaspoonful every three hours.

Sept. 9th.—Temp., 100⅘°; pulse, 92. Diarrhea checked. Rested well. Occasional spasm of bladder. Urine passes, as yet, entirely through incision. No pain.

Discontinue diarrhea mixture. Give acidi nitro-mur. dil., gtt. x, well diluted, three times daily; quiniæ sulph., grs. v, every three hours. Introduced No. 8 sound, through urethra, into bladder.

Sept. 10.—Temp., 99½; pulse, 88. Feels well. Spasm of bladder less annoying. Voided a portion of urine by natural channel.

℞ Continue acid and quinia.

Sept. 11th.—Temp. 99°; pulse, 88. Doing well, no pain or spasm of bladder. Portion of urine continues to pass through urethra. Rests well. Appetite good. Much improved in appearance.

Sept. 28th.—Discharged. Temperature and pulse normal. General condition improved. Passes urine entirely through urethra.

SARCOMA CUTIS.

BY T. F. PREWITT, M. D., ST. LOUIS.

Louis H——, æt. 53, married in 1861, and is the father of eight children, all healthy. Had syphilis at the age of eighteen—thirty-five years ago. Had at that time a chancre and non-suppurating buboes. Two years ago had some ulcers on back, arm, shoulders and breast, and was treated for syphilis, the sores healing under this treatment, leaving whitish, irregular cicatrices at their site. One year ago, noticed a lump upon right side of neck, at anterior margin of trapezius muscle, midway between angle of jaw and acromion. This grew to the size of a partridge egg, became pedunculated and ulcerated on top. This was removed, June, 1882, and the incision healed, leaving a small cicatrix (visible upon the cut). Within a short time the patient observed a lump below the margin of the pectoralis major muscle, just in front of the right axilla, which now, May 25, 1883, is as large as an orange. Subsequently nodules developed at various points on and under the skin. Besides those seen in the cut, there were two or three nodules in the skin on the back, one under the skin down near the waist, and one considerable tumor, larger than a hen's egg, just below the outer border of the crest of the left ilium. The lymphatics of the axilla were not involved. The tumor

near the acromion had already begun to soften at its apex, but the nodules upon the anterior portion of the chest were very hard, with a smooth, red, glistening surface resembling keloid. Soon the nodule on the skin, just above the subcutaneous tumor near the axilla, began to ulcerate and fungate, and bled readily. Microscopic sections, showing the neoplasm to be

small round cell sarcoma, were made from a portion of this nodule, removed by consent of patient.

Primary sarcoma of the skin is so rare as to make a report of the case interesting. In this case, the coincidence of its occurrence in a syphilitic subject, who had suffered from extensive ulcerations of the skin, forcibly suggests a possible indirect relationship, at least, between them. That the existence

of a constitutional condition, marked by extensive implication of the integument, should have determined the occurrence of perverted cell action and the development of a neoplasm of this character in the skin seems not improbable.

PUTRID ABSCESS OF THE ABDOMINAL WALL.

BY WALTER C. DUNCAN, M. D., VANDALIA, ILL.

Was called to see Mrs. L——, aged 60, on the morning of Aug. 28, and found on examining my patient a swelling in the right inguinal region, about as large as an orange, of an angry red color at the center, and paler than the surrounding surface at the base. Could detect no evidence of the presence of fluid by palpation, neither could I feel any foreign body per vaginam. The bowels were regular, the kidneys acting nicely, pulse 85 and strong, indicating some excitement of the circulatory system, and the tongue heavily loaded at the base with a dirty white coat. Close inquiry into the history of the case elicited the fact that the swelling was first observed some three weeks previously, at which time it was about as large as a pigeon's egg, and situated near the upper and outer border of the inguinal region; it had at no time during this period occasioned any considerable pain, the patient performing her usual household duties; she was, however, frequently seized with a fit of shivering, and the appetite was very capricious.

On the morning of the 28th she was taken with a severe chill, which lasted about an hour, the fever following the paroxysm not rising very high. She, as yet, felt no pain in the tumor, but remarked a sense of fullness in that region. Prescribed arterial sedatives and tonics, and ordered flax seed poultices to abscess. Continued tonics for five days, with flax seed poultices to tumor, which had steadily increased in size, until, on Sept. 3rd, it involved the whole inguinal region, being limited by the line of the crural arch below and the median line toward the center. As yet it exhibited no evidence of pointing, but was growing very painful under the action of the poultice; no pus in the urine, bowels still fairly regular, and

pulse nearly 100. It was clearly not a perityphlitic abscess, else we would have found considerable disturbance of the bowels; it was not pelvic, else it would have been diffused over the whole abdomen. Hence, from its being so rigidly confined in its encroachments, and because of there being so small an amount of visceral disturbance, I diagnosed abscess of the abdominal wall.

Patient was supported by tonics and stimulants, and on the 9th of September I decided to open the sac, which I accordingly did, with a large trocar; immediately upon the withdrawal of the trocar from the cannula there was a rush of noxious gas, followed by a pint of the most fetid, foul smelling pus I ever saw. After the contents of the sac were pretty thoroughly discharged I administered an opiate, and left my patient feeling pretty comfortable, with the exception (as she described it) of a curious sense of "faintness in the stomach."

In about three hours afterwards I was hastily summoned to her bedside, as she was rapidly sinking; found her gasping for breath, bathed in a clammy perspiration, pulse fluttering and almost indistinguishable, and extremities cold. Gave digitalis in five-drop doses, alternating every hour with five grs. carb. ammonia, and had the satisfaction of finding her bright and cheerful at my next visit.

I now put her on milk punch and beef tea; and on the 11th I washed out the sac with a five per cent. solution of carbolic acid, and injected iodine. Patient made a good recovery.

RELATION OF PHYSICIANS TO POPULATION.—*Siglo* Médico gives the following as the proportion of physicians to the population in different countries:

France,	2.91	per 10,000.
Germany,	3.21	"
Austria,	3.41	"
England,	6.	"
Hungary,	6.10	"
Italy,	6.10	"
Switzerland,	7.06	"
United States,	16.24	"

—*New Remedies*, Sept., '83.

EDITORIAL.

PROPHYLAXIS AGAINST MALARIA.

In a late number of the *British Medical Journal* a correspondent from Rome gives a very interesting account of recent legislation by the Italian Chamber of Deputies, requiring landed proprietors to put under cultivation any land belonging to them in the Campagna within a certain distance from the Roman forum.

This law is regarded as calculated to effect most important changes in the way of public hygiene. It is believed that the thorough drainage and cultivation of the Roman Campagna will redeem that immense tract of land, which has been now for so many years given over to desolation and disease by reason of its pestilent miasm, and make it again a source of profit to the country by reason of its fertility, instead of being a curse and a constant loss on account of its fatal influence upon those who attempted to dwell there. It has been shown that in former ages there was a system of thorough subsoil drainage, which was allowed to be destroyed and become useless.

Already a zone of a mile and a quarter around Rome has been brought under fairly good cultivation, and the new laws will bring under cultivation a zone of six miles around the city. It is difficult, as the writer remarks, to overestimate the immense value of such a measure.

He further refers to a letter written by the celebrated Italian investigator and physician, Professor Tommasi-Crudeli, relating to prophylactic measures which should be taken in order to protect the laborers on the Campagna, whose presence will

be necessary there even in the unhealthy seasons of the year in order to carry into effect the provisions of this law and secure the drainage which is to make that miasmatic region once more safely habitable.

He refers to the advantage to be derived from providing suitable food, and housing the laborers in the more healthy part of the Campagna, or providing sleeping quarters elevated above the ground in the trees, as has lately been done for the laborers on the Isthmus of Panama.

Quinine and salicine have undoubted prophylactic properties, but these drugs are costly, and when taken for a length of time derange the system to some degree. Professor Tommasi-Crudeli secured the co-operation of Dr. Riechie, the chief medical officer of the South Italian and Calabrian railways, in order to test thoroughly the prophylactic virtues of arsenic. The result of their observations, as found in the report of that physician to the director-general of the company, shows that when the arsenic was given carefully and in sufficient doses decided results were produced.

The results as detailed certainly warrant further testing of the prophylactic value of arsenic. In the experiments already referred to the remedy was administered in gelatine lamels or wafers, each of which contained about one thirty-fifth of a grain of arsenious acid. One lamel was given daily for four days, when the dose was doubled, and after four days a third was added, and so on, till four were taken daily. In a few cases the dose was increased till seven lamels, about one-fifth grain, were administered daily, and apparently with better results.

DR. L. DUNCAN BULKLEY is giving his seventh annual course of lectures on diseases of the skin in the pathological amphitheater of the New York Hospital. The lectures are delivered weekly, and are free to practitioners and students of medicine.

BOOK REVIEWS AND NOTICES.

LESSONS IN QUALITATIVE CHEMICAL ANALYSIS. BY DR. BEILSTEIN. Translated from the fifth edition, with copious additions, including lessons in organic and volumetric analysis, by CHARLES O. CURTMAN, M. D., etc. Illustrated. *St. Louis: St. Louis Stationery and Book Co.*, 1883. 16mo, pp. 155; cloth.

A man who succeeds in preparing a thoroughly good and valuable *text-book* that gives satisfaction to students and teachers "has deserved well of the Republic." When an instructor of the experience and ability of Prof. Curtman is so well pleased with a text-book in another language that he deems it worth while to take the trouble to translate it, and, after making some additions, to adopt it as the best that he knows for use in his own classes, it will be very safe for others to expect like satisfaction in their own use of the same.

We do not think that any disappointment will be experienced by those who shall so purchase Prof. Curtman's translation of Beilstein's Chemical Analysis. It is admirably adapted for the use of medical and pharmaceutical students. It contains the material for study and practical work sufficient to qualify the student for any of the ordinary requirements of professional work, and to give a good preparation for a more exhaustive study to any who desire to qualify themselves as professional chemists.

Commencing with instructions in the common manipulations that are practiced in the laboratory, we find next a series of forty-five examples for qualitative analysis, with detailed instructions for the proper performance of the work. Then follow instructions for a systematic examination of substances with a single base.

The chapter on the use of the spectroscope, the account of Marsh's test for arsenic, the examples of qualitative analysis of organic substances, and the instructions as to qualitative analysis, with examples for practice, are additions by Prof.

Curtman, and, as he states in his preface, more than double the size of the original.

We have received also a four page leaflet to be added to the book, and which will be incorporated in the body of all future issues. It comprises sections on Bile Constituents, Albumen, Gelatin, Uric Acid, and Urea.

We take great pleasure in heartily commending to all those who have occasion to give practical instruction in chemistry this work of a St. Louis professor, issued by a St. Louis publishing house.

REPORT OF THE BOARD OF HEALTH OF THE STATE OF LOUISIANA, 1882, and first six months of 1883. 8vo, pp. lxiii-637; paper.

This large volume contains a full account of the quarantine and sanitary operations of the Board of Health of Louisiana during eighteen months. There is a detailed history of the subject of quarantine in this country, with a study of the effect of quarantine upon commerce. A full account is given of various epidemics of yellow-fever, small-pox, and other diseases, which have occurred in the state of Louisiana.

The influence of the Mississippi river floods upon the health of the people residing upon its banks is considered.

There is a vast amount of historical and statistical information with reference to New Orleans and Louisiana.

Some fifty pages are given to a careful study of yellow-fever, its symptoms and pathological anatomy as compared with malarial fever. This paper is profusely illustrated with chromolithographs, the text and illustrations both being the work of Dr. Joseph Jones, the able and efficient president of the Board of Health. The whole volume reflects great credit upon his efficient work, and shows indefatigable industry.

INDEX CATALOGUE OF THE LIBRARY OF THE SURGEON-GENERAL'S OFFICE, U. S. ARMY. Vol. IV, E—Fizes. *Washington: Government Printing Office.* 4to, pp. 1033; cloth.

Those whose attention has not yet been directed to the subject may understand something of the value of this most excellent and exhaustive index, from the fact that the volume in hand devotes to the titles of books and articles on the ear thirty-six pages; on education, sixty-three; on epilepsy, twenty-eight, and on the eye ninety-nine.

The statement is made that unless another appropriation is made by Congress the further publication of this valuable work must stop with the next volume, the funds for the work being exhausted. It is to be hoped that the great value of this excellent work to the medical profession may be brought to the attention of our representatives in time to insure a prompt and ample appropriation for its completion.

THE PRACTITIONER'S READY REFERENCE BOOK. A handy book in office and bedside practice. BY RICHARD J. DUNGLISON, A. M., M. D., etc. Third edition, thoroughly revised and enlarged. *Philadelphia: P. Blakiston, Son & Co.* 1883. 8vo, pp. 529; cloth.

Dr. Dunglison's ready reference book contains a large amount of valuable material which he has gathered together from a vast number of sources, and which was scattered through a vast number of books and periodicals. It is an admirable compilation, and will be of value to every physician who may have it on his office-table or book-shelf. The additions made in the third edition are practical, and materially enhance the value of the volume.

ANATOMY, DESCRIPTIVE AND SURGICAL. BY HENRY GRAY, F. R. S., with an introduction on general anatomy and development by T. HOLMES, M. A., etc. A new American from the tenth English edition, to which is added LANDMARKS, MEDICAL AND SURGICAL. BY LUTHER HOLDEN, F. R. C. S., with additions by WM. KEEN, M. D. *Philadelphia: Henry C. Lea's Son & Co.* 1883. 8vo., pp. 1028; cloth, sheep, half Russia.

No extended notice is required of a work whose title has become almost a "household word" among physicians and medical students. "Gray's Anatomy" has long held a first place in the regard of the profession. It is not to be expected that many or great changes will be noted in successive editions of such a work. Dr. R. J. Dunglison has had the supervision of the work as it passed through the press, and to his care and abilities are due the freedom from errors which we note. The publishers have decidedly added to the value of the volume by incorporating therein Mr. Holden's "Surgical Landmarks."

BOOKS AND PAMPHLETS RECEIVED.

Diagnosis of Ovarian Tumors. By Edward Borck, A. M., M. D.——The Classification, Training and Education of the Feeble-minded, Imbecile and Idiotic. By Chas. H. Stanley Davis, M. D.——College of Medical Practitioners, St. Louis. Announcement of the sessions of 1883–84.——The Powers and Duties of Local Boards of Health, issued to health boards and health officers by the State Board of Health of Wisconsin.——Second Annual Announcement of the Iowa College of Physicians and Surgeons at Des Moines.——Index Catalogue of the Library of the Surgeon-General's Office, U. S. Army. Vol. IV, E—Fizes. Washington: Government Printing Office.——Puerperal Eclampsia. By Benjamin H. Riggs, M. D., Selma, Ala. Extract from Proceedings of the Medical Association of the State of Alabama, Session of 1883.——A Guide to American Medical Students in Europe. By Henry Hun, M. D. New York: Wm. Wood & Co. 8vo, pp. 151; cloth. (International Book and News Co., St. Louis.)——The Medical Student's Manual of Chemistry. By R. A. Witthaus, A. M., M. D. New York: Wm. Wood & Co. 8vo, pp. 370; cloth. (International Book and News Co., St. Louis.)——Medical Education and the Regulation of the Practice of Medicine in the United States and Canada.

A MODEL VETERINARY SCHOOL.—The Berlin Veterinary School was attended last winter by 247 matriculated students, the largest attendance during the century of its existence. The main building with its three lecture halls, its large, well-stocked library, and numerous lodgings for officials, etc., contains also an extensive anatomical department, with very valuable collections. The pathologico-physiological institute connected with the establishment is situated in one of the new wings. The dog hospital, the horse hospital, the operating rooms, riding-school, smithy, etc., are considered the best of their kind. In the cow stables are to be found the favorite races of all countries, partly for purpose of instruction, partly for the uses of the dairy. The horse hospital can accommodate 100 sick horses; in it there were treated, in 1882 no fewer than 2,241 animals; 600 were examined and dismissed, 7,085 sent to the polyclinic. In the stationary dog hospital, 1,200 patients were treated; in the polyclinic, 3,215.—*N. Y. Tribune.*

REPORTS ON PROGRESS.

MEDICINE.

Hydrargyrum cum Creta.—DR. J. M. LAZELLE states that hydrargyrum cum creta, under some circumstances, and after long keeping, undergoes some kind of deterioration which renders it more or less poisonous, its action then resembling that of the bi-chloride of mercury. It becomes granular, hardened, decidedly so between the finger and thumb. In this state it has repeatedly been given to children in small doses with uniformly the same result, to-wit: vomiting, purging, griping and prostration. He does not attempt to explain the chemical change, but is certain as to the fact stated.—*Trans. State Med. Soc. W. Va.*, 1883.

Digitalis Sweat.—DR. J. M. LAZELLE states that tincture digitalis, long continued, produces a peculiar and remarkable kind of sweat over the whole body, resembling and representing the washerwoman's hands—the "washerwoman's skin." This is continuous, and will remain several days after discontinuing the remedy. The skin is bathed in perspiration, and is shriveled and corrugated. He claims that he has seen several cases of this sort, though the result is not mentioned in the books.—*Trans. Med. Soc. W. Va.*, 1883.

Simple Remedy for Intermittent Fever.—Professor Tommasi-Crudeli, in a letter to the Italian Minister of Agriculture, calls attention to a simple remedy which has been used with good results by Dr. Maglieri. A lemon freshly gathered, and unpeeled, is cut into very thin slices, put into an earthenware jar with three cupfuls of water, and boiled down to one cupful. The decoction is strained through a cloth, the remains of the lemon being firmly squeezed. The decoction ought, if possible, to

stand over night in the open air, and be drunk some hours before the access of fever is expected.—*Brit. Med. Jour.*, Oct. 4, '83.

Anthelmintics; Mode of Administration.—R. L. MACDONNELL recommends that santonin be given, as first suggested by Ringer, by mixing two to four grains, according to age, with a drachm of castor oil, and administering before breakfast, repeating the dose two or three mornings successively. Male fern, too, should be administered in connection with oil, instead of giving the oil two or three hours after the male fern. One part of the oleo-resin of male fern, with two parts of castor oil, is perhaps the best mode of administering it. It is best given in capsule.—*Canadian Practitioner*, Sept., '83.

Convallaria Maialis.—W. S. GOTTHEIL gives the result of quite an extended test of a number of new remedies in the medical wards of the Charity Hospital, New York. Among the most important of these were the observations made upon convallaria maialis (lily of the valley), the fluid extract. Of nine cases of organic heart disease treated with this remedy moderate effects were produced in six, in three there was no result. In none of the cases in which irregularity or intermittency of the pulse was marked did convallaria affect the heart-rhythm. The amount of relief afforded was considerable, and he regarded it as occasionally a valuable agent in the treatment of organic heart disease. He found it serviceable also in several cases of functional trouble. The dose administered was considerably in excess of those usually advised. He gave to several cases a dram three times a day without bad effects.—*Med. Rec.*, Sept. 8, '83.

Eucalyptol.—Of fifteen cases of phthisis treated with this agent distinct benefit was obtained in only four, slight benefit in four others, while seven were not at all affected by it. It seemed to be of most service in cases accompanied with abundant muco-purulent expectoration.

Yerba Santa and Chekan did not give satisfactory results, the gastric derangement caused by the drug more than overbalancing the advantage derived from the expectorant qualities, especially in the use of the former of the drugs.

Manaca afforded marked relief in seven out of twelve cases of chronic rheumatism, and considerable relief in another. The dose administered in most of the cases was largely in excess of that usually recommended. He was obliged to give two to four fluid drams as a dose in order to obtain any decided benefit.

Oleum Gaultheriæ proved to be of value in the treatment of acute rheumatism, in doses of five to ten drops three times a day. The local symptoms disappeared promptly, but there was a certain amount of disability left which the drug did not relieve, and for which it was necessary to resort to friction, massage, etc.

Quebracho gave excellent results in the relief of dyspnea from asthma, valvular heart disease, Bright's disease, chronic bronchitis and phthisis. The doses used varied from one-half dram to two drams, three times a day.—*Med. Rec.*, Sept. 8, '83.

SURGERY.

Plaster of Paris Splints.—JOHN CROFT recommended to the British Medical Association the following method of preparing and applying plaster of Paris splints for fractures of the leg:

To make the splints (1.) a piece of house flannel or old shrunk blanket, or any suitable substitute, is selected. Take the circumference of the leg above and below the knee, at the largest part of the calf, just above the ankle-joint, from the front of the ankle-joint round the heel to the front again, and at the middle of the metatarsus. The flannel of each splint should be in width half an inch less than half the circumference at any of those points, making the width of the two splints one inch less than the circumference of the limb at any corresponding part; its length should extend from above the knee to the middle of the metatarsus. Four pieces are required—two for each splint.

(2.). Prepare two bandages of common muslin, each five or six yards long and two and a half inches in width.

(3.) A handful or two of good, dry plaster is mixed with water to the consistence of thin cream.

(4.) The inside pieces of flannel may be laid on the table or bed, the outer surface being upwards.

(5.) The outside pieces are to be soaked in the plaster separately, and laid out on their respective inside pieces.

Application.—While traction is kept up, and the ends of the broken bones are maintained in apposition, the splints are to be applied and smoothed, then the bandage is to be put on. Traction should be maintained throughout the hardening of the plaster, which requires about three minutes. Next the limb should be laid on a large, soft pillow, the toes directed upward, and the knee a little bent. In applying the bandage observe great caution that it is not drawn tightly anywhere, and that no one turn of the bandage is tighter than another, insuring an equal support everywhere. The splints should not meet by half an inch, either down the front or back. The intervals are spanned by the dry porous muslin, fixed to the splints by the plaster which oozes into it from the outer layer of flannel.

If it becomes necessary, at any subsequent time, to ease the splints, or to inspect the limb at any point, the bandage can be slit up with scissors along the middle line in front, when one or both of the splints can be eased from the limb, and re-adjusted by the addition of another bandage. It is undesirable to wholly remove the splints. They are hinged together at the back by the muslin bandage spanning that interval there. The trimming of the apparatus may be done as soon as the plaster shall have hardened.

If the surgeon is short of assistants, he may apply the outer splint first, and lightly bandage that on, and when the outer one has nearly hardened he may put on the inside one. As swelling subsides, causing the loosening of the splints, an additional bandage should be put on. At the end of ten days, if the patient be convalescing, the outside bandage may be gummed, or a fresh gummed bandage rolled on. This will last till the splints are no longer needed.

Plaster of Paris in Recent Fractures.—At the last meeting of the British Medical Association two papers were read by prom-

inent English surgeons, advocating the early application of plaster of Paris splints in cases of fracture. Mr. Croft, of St. Thomas Hospital, stated, in his paper, that in nine hundred and one cases of fracture treated in that institution by the early application of plaster of Paris none but good results ensued; no instances of gangrene, or bad or delayed union, or splint sores, occurred. Christopher Heath says, in his paper, that fractures of the forearm are the only ones which seem to him unsuited for treatment with plaster of Paris, on account of the danger of drawing the two bones together.—*Brit. Med. Jour.*, Sept. 22, '83.

Subnitrate of Bismuth in Fetid Sweating of the Feet.—M. VIEUSSE reports that excessive sweating of the feet, whether a simple hyper-secretion of sweat, or accompanied by acute pains, is easily cured by friction with the subnitrate of bismuth in powder. He says that contrary to the general opinion, according to which suppression of the exaggerated transpiration may induce numerous metastatic troubles, the cure of this trouble by the bismuth has never been followed by accidents. The action of the remedy seems to be purely local, modifying the cutaneous surface, making it stronger and more resistant. It may also have an influence upon the sudoriparous glands. In some cases the effect upon the sweating is only temporary, but even in these cases it seems to remove permanently the extreme fetor that is so annoying, and which frequently is so rebellious to treatment.—*Lyon Med.; Gazette Hebdomad.*, July 7, '83.

Thapsia Plaster for Weeping Sinew.—J. W. COLCORD has found, by personal experience and by testing it upon others, that a piece of thapsia plaster bound on with a bandage relieves the pain of a "weeping" sinew in a few hours. Considerable inflammation of the skin may be caused by the application, but the relief to the strained sinew is complete.—*New Remedies*, Oct., '83.

OBSTETRICS AND GYNECOLOGY.

Amenorrhea.—Dr. T. L. HATCH, in discussing different remedies for this condition, insists upon the necessity of judicious selection of remedies adapted to special cases. He says that in suppressed menstruation from nervous shock he has found the best results from the following formula:

℞. Ext. nucis vom. fl., - - - - mxx.
Aquæ, - - - - - - ʒiv.

M. Sig. Teaspoonful four or five times a day.

This is particularly indicated if there are colicky pains in the abdomen.

In these cases of shock, if there is sensitiveness to noise and much restlessness, $\frac{1}{10}$ grain caffein every three or four hours acts like a charm, relieving nervousness and jactitation, and in a few hours restoring the suppressed function. In some cases of suppression from shock, pulsatilla is the best remedy. It is specially so in the case of blondes who are disposed to be phlegmatic. Suppression from catching cold will generally be relieved by aconite, pulsatilla, gelsemium and ipecac. If there is much fever, with rapid pulse, aconite alone, carried to the full sedative effect, will usually be sufficient, but sometimes it will have to be aided by some remedy like pulsatilla, ergot, macrotys, or nux vomica, to act as a nerve tonic.

Gelsemium is indicated when there is much pain in the back and head, with pinched features, and bright, sparkling eyes, or any disturbance of vision:

℞. Ext. gelsemii fl. (green root), - gtt. x–ʒj.
Aquæ, - - - - - - ʒiv.

M. Sig. Teaspoonful every hour.

If there is dryness of the skin or much leucorrhea, ipecac., kept just within the bounds of nausea, will be the remedy. He thinks macrotys is indicated oftener than any other remedy, especially when there is a relaxed, debilitated condition of the organ, or when the patient has caught cold and the circulation has been regulated by the appropriate remedy.—*Therapeutic Gazette*, May, '83.

Puerperal Fever.—DR. S. L. JEPSON concludes a paper on this subject with the following summary of treatment:

1. Irrigate the whole genital canal *pro re nata* with anti-septic solutions.

2. Employ opium to control pain and nervous irritation.

3. Use quinia in not less than ten-grain doses, morning and evening, so long as high temperature exists. If this fails, after a fair trial, salicylate of soda may be used in addition, or Warburg's tincture may be tried, or hypodermics of carbolic acid.

4. Alcoholic stimulation is generally demanded, and quinia in tonic doses should be employed, after the reduction of the temperature has been secured.

5. Employ turpentine locally, when pain and tympanitis require, and meet minor indications with the remedies which experience will at once suggest.—*Trans. Med. Soc. W. Va.*, 1883.

Ergot in Obstetrics.—DR. D. PORTER MORGAN formulates the following rules for administering ergot:

1. Never give ergot till the uterus is thoroughly dilated or dilatable, and the perineum is thoroughly relaxed, with the pelvis properly shaped, and it is better not then.

2. Not till the head has passed the perineum, and continued inertia exists.

3. Give it to secure contraction in post-partum hemorrhage, and then not till the uterus is emptied of placenta, clots, etc., by other means; and in this case continued pressure over the fundus, after the method of Credé for expelling the placenta, is much better; besides, the intra-uterine injection of very hot water is superior to ergot, and will not produce nausea, vomiting and prostration, as is frequently done by ergot.

PROF. LANDIS, in discussing Dr. Morgan's paper, said that at one time he resolved to attend one hundred successive cases of obstetrics without using ergot, carefully watching the result. Towards the completion of the series two cases occurred, showing how often we may be mistaken as to what we suppose to be the action of ergot. In the first case uterine action was so imperfect, and he was so weary of the case, that he sent for ergot, resolving to break over his rule. Before the ergot arrived, however, active uterine pains set in, and continued so

violent that the fetus was at once expelled and the labor terminated. Had the patient taken a single dose of the ergot, he would have been quite certain that the active contractions were the result of it. In the second case there was hemorrhage, which resisted all the usual means at hand to arrest it. He felt that if the patient died he would be criticized for omitting to administer ergot, and accordingly gave a dose of the fluid extract. Before it was fairly swallowed vomiting took place, active uterine contractions set in, and the hemorrhage was at once arrested. He is of the opinion that tonic contractions of the uterus come on during labor very often without any obvious cause, and sometimes after ergot has been given, but entirely independent of any so-called oxytocic effects of the drug. He believes that ergot causes uterine contraction by producing nausea.—*Trans. Med. Soc. West Virginia*, 1883.

Excoriated Nipples.—DR. TAUSZKY recommends the following:

℞.	Balsam Peruv.,	gm. iv.
	Olei amygdal.,	gm. vj.
	Aquæ rosæ,	gm. xxxv.
	Mucil. acaciæ	gm. vj.

M. Sig. Apply after each nursing, the nipples being carefully cleansed.

PARIS GREEN.—The *N. Y. Tribune*, in a late issue, sounds a needed note of alarm about a danger recognized by few and therefore the more alarmingly menacing. The extreme carelessness in the use of Paris green must result in peril and absolute disaster to the health of multitudes. The writer maintains that an investigation would furnish abundant proof of the transferring of this poison to lettuce and other vegetable beds in amounts sufficient to injure thousands.. Estimate if you can how much of this poison is finding its way into the wells of farmers and the reservoirs which supply the drinking water of New York! Yet everywhere men and boys are busy with sprinkling pots scattering the poison, as if by some miracle it should find an antidote, or be rendered by Nature's processes harmless to mankind.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, September 20, 1883—DR. PAPIN, Pres., in the Chair.

UTERINE AND RECTAL DISEASE.

Dr. Ford read a paper on "The Interdependence of Uterine and Rectal Diseases." (Vid. p. 399).

Dr. Coles.—I would like to ask the doctor if he has ever met with any disagreeable results from making the subcutaneous incision—results such as hemorrhage, thrombosis, etc.?

Dr. Ford.—I can't say that I have. I have seen some threatenings of submucous bleeding, which might have led to abscess, but they never came to anything, and required no special treatment.

Dr. Papin.—The extremely relaxed condition of the connective tissue in that part would perhaps lead to hematocele or even tendency to inflammation.

Dr. Ford.—Not if the submucous incision be properly done and the plug kept in long enough. I have seen fistula result from the open incision, which is also frequently followed by very free hemorrhage.

Dr. Papin.—I must say that the treatment in full is rather trying, both to the patient, nurse and physician. It requires almost constant attention day and night.

Dr. Ford.—It does so, sir, in severe cases.

Dr. Moses.—It was a very interesting paper, and would require a great deal of thought to answer it and investigate some of the points and questions presented. Undoubtedly disease of the rectum and bladder may affect the uterus; undoubtedly congestion of those parts might produce congestion of the uterus and vagina, and thereby be the cause of uterine disease. It is very rare that we have one organ affected without having

the other somewhat affected. It is very rare that we have prolapsus of the uterus without some congestion of the rectum. We very rarely have ulceration or fissure of the uterus without some rectal irritation; and I think these parts are so blended together that we may almost always treat them as one. I have had no surgical experience, such as Dr. Ford speaks of, in the treatment of rectal disorders. No doubt his treatment, judiciously carried out, would be very effective; it ought to be, from the particularity with which it is made.

Dr. Barret.—I would like to ask the doctor how long the sphincter remains uncontractile—paralyzed after the stretching and incising?

Dr. Ford.—My object is to keep it paralyzed as long as possible.

Dr. Barret.—How long do you succeed in keeping it paralyzed?

Dr. Ford.—After simple stretching with the thumbs, the sphincter will remain paralyzed only for a few days. By stretching with the fingers and Sims' speculum, we may make the anal margins meet the tuberosities of the ischium, but very often without lasting relief of the sphincterismus. I have had recourse to division of the sphincter in other cases. In cases treated some years ago I divided the sphincter through the mucous membrane; this procedure was much more effective, lasting a good deal longer,—two weeks and more elapsing before it healed, and sometimes even longer than that. But it has the disadvantage of being occasionally followed by partial incontinence of fluid feces; and in one or two instances, a fistulous orifice, a blind, external fistula, has resulted, very annoying to the patient. I have found the best method, or at least the best in certain classes of cases, to be the submucous incision of the sphincter on one side. In one case I have made it on both sides, in combination with stretching, by means of the dilator, which is a very powerful instrument; we may thus produce a relaxation of the sphincter which will last for three weeks, or nearly a month. I think the best results are realized by this method of treatment. Of course, a great deal will depend upon the resistance of the sphincter, the constitutional tone of the patient, and the contractility of the tissues. In some cases the incision heals very quickly; but in other cases

the result of the operation is relief for a longer period—it is much more permanent.

Dr. McPheeters.—The object of the forcible dilatation of the sphincter is to produce a paralysis of the circular fibers of the sphincter.

Dr. Ford.—That is the object. We divide the fibers by section, or rupture, and while the parts are healing we have an opportunity to medicate the interior of the rectum; the patulousness of the anal orifice will not permit any retention of fecal matter. There is a certain amount of stenosis present, and it is to relieve the stenosis that we operate in this way.

Dr. McPheeters.—Do you recollect the case we had together, in which that operation was resorted to for fissure, in which the dilatation was very extensive; the laceration was complete, and the plan of treatment that you have described was adopted? This patient was entirely relieved, and has never suffered with that excessively painful trouble since; and since then she has given birth to a child, when she very much feared she would have a repetition of the trouble, but it did not recur, and she has been entirely relieved by that operation. She suffered excruciatingly before the operation.

Dr. Ford.—In that case the laxative was given the day before the operation, and we had trouble with the constant coming down of fluid feces. We should have given the laxative forty-eight hours before.

Dr. McPheeters.—I have listened to the doctor's paper with a great deal of interest. I think it is very important that we should thoroughly understand these rectal complications of uterine disease, and we may say uterine complications of rectal disease. I am, at the present time, treating a young lady for rectal fissure, and I have been at a loss to ascertain the cause of it. There was in her case no marked constipation, as there frequently is in these cases; there were no hemorrhoids, external or internal. There was very marked pain on defecation. I found, upon examining the rectum, that there was a marked fissure, or rather a small ulcer, of gray color and of irregular shape, just extending to the sphincter and within. I could find no cause for it.

Dr. Prewitt.—I have no doubt the treatment that Dr. Ford

has suggested for fissure will be thoroughly efficient, certainly it ought to be, as it is a pretty formidable operation. I know that Agnew and other surgeons recommend the subcutaneous division of the sphincter. I have treated a great many cases of fissure without going to that extent, and I don't know of a single case where it has recurred. Dilatation—stretching of the sphincter with simply a division of the superficial fibers, has always proved amply sufficient. In fact, fissure of the bowel is simply an irritable ulcer, the trouble being kept up by the action of the sphincter, starting from a little crack in the mucous membrane at some period when constipation has existed, and then kept up and aggravated. I have very little doubt that if we would simply stretch the sphincter, take a curette and scrape over the surface when the ulcer makes its very start, we would cure it without division of the muscular fibers at all. I think we could cure the great majority of cases in that way, overcoming its irritability, and then convert it into a simple ulcer, which, with a little care, would heal up. In my experience I have never failed to cure these cases by simple dilatation, with a very superficial division of the sphincter fibers, and it does not seem to me that it is necessary to make a deep incision. In fact, it seems to me that it is not very good practice. I know that Agnew recommends it in his work, but it seems to me it is unnecessary.

Dr. McPheeters.—What do you mean by a simple dilatation?

Dr. Prewitt.—I mean a forcible dilatation. The old plan was to cut down through the ulcer clear through the sphincter. That has been found by experience unnecessary, and we now make a subcutaneous section of the sphincter only, and do not divide the fibers completely by cutting directly through the ulcer. We make a subcutaneous section through the depth of the sphincter, and certainly it seems to me, unless experience has demonstrated that it is necessary to do so, that it is better not to do it.

Dr. Coles.—I must confess that I do not exactly understand Dr. Prewitt's position. It seems to me that the treatment of a case of this sort must be such as will produce an alterative effect upon the ulcer. This can be done by simple caustic, as far as that is concerned; but the most essential point is the giving of rest to the muscles immediately surrounding the dis-

sure. Now if there is any philosophy in cutting a fissure at all, it seems to me that it ought to be cut deeply. I do not see what good cutting a few fibers will do, because it certainly does not paralyze the sphincter; it does not relieve the sphincterismus; on the contrary, it increases it; the sphincter is rendered more irritable by the cut, and contracts with more persistency; so that I should think that it would tend to aggravate the trouble. My experience has been just the reverse of Dr. Prewitt's. I have seen several cases that have been very annoying. I first tried the method recommended many years ago in a learned book on the subject written by Dr. Bodenhamer. He was really a pioneer in the treatment of this trouble. He lays great stress upon the necessity of giving rest to the sphincter.

Dr. Barrett.—Dr. Bodenhamer is opposed to stretching.

Dr. Coles.—He does not cut through the sphincter.

Dr. Barret.—And he is opposed to forcible dilatation.

Dr. Coles.—That is not my recollection of his position on the subject. You may be correct. I will say this, however. I have treated a number of these irritable sphincters by just nicking them a little, and then stretching them with all the strength I could command. The patients were always benefited, but many would come back and complain again. I recollect a case, which, by the way, Dr. Barret saw. We gave chloroform, and the doctor will remember how difficult it was to get her under the influence of the anesthetic. Dr. Barret has stronger thumbs than I have, and he succeeded in partially rupturing the sphincter by using great force. The sphincter gave way under the doctor's thumbs, and the patient got well and has never been troubled since.

Dr. Prewitt.—What was the depth of the cut?

Dr. Coles.—Nearly through the sphincter. I had a case not long ago in which I attempted to perform the same operation. I made a rather superficial cut, and the patient was relieved, but she came back at the end of six weeks complaining of the same intense burning that she had before. I then made a deep cut, put in a Sims' speculum — the longest blade — and pulled with all my might, and pushed with the thumb on the opposite side until I could feel the tissues were distinctly giving away under the pressure. After this operation she recovered with-

out any trouble. From my experience, I would prefer to have the sphincter completely paralyzed. If I cut, I would make a deep cut. I don't know that I understand Dr. Ford exactly as to how he would introduce the knife in his submucous operation.

Dr. Ford.—Laterally, of course; just at the margin of the external sphincter.

Dr. Coles.—You would have to have a pretty long blade to carry it as far as the ulcerated spot is situated in some instances.

Dr. Ford.—We just use it to divide the sphincter; an inch and a quarter is enough. I divide the ulcer first.

Dr. G. A. Moses.—I must say, so far as regards a good many of these fissures and ulcers, I think, with Dr. Prewitt, that a simple division through the base of the muscle is oftentimes sufficient. That they are frequently associated with various forms of uterine disease I think every one who practices gynecology must be aware; so much so that it should be an absolute rule to thoroughly examine the anus and rectum of every patient who presents herself with any amount of uterine trouble; and I think it is quite rare in these cases, particularly in displacements that have existed for any length of time, that we find there is not more or less rectal or anal disturbance. As Dr. Ford has shown in his paper, the circulatory system of the one is so intimately blended with that of the other, and the anastomoses are so abundant in these parts, that any disturbance of the circulation or nutrition of one almost invariably affects the neighboring organ; and the simple division of the sphincter for the cure of rectal disease is not always sure to relieve the trouble, without the use of such remedies in relation to the uterus as will relieve the rectum of its concomitant irritation; no matter what is done otherwise, you will be obliged to meet the disturbance of the uterus. Frequently the fissure at the anus is of such a recent character that I find the application of the solid nitrate of silver a sufficient relief. I am frequently forced to make some application of this sort, from the fact that many of the patients that I see are either at the clinic or at my office, and I cannot see them at their own houses. And I will say that the division of the sphincter is very frequently imperfectly carried out. The sphincter should not be merely

stretched, but the process should be prolonged by a kneading of the muscles. There is, even in the most thorough division of the sphincter, very little rupture of the muscular fibers. I would knead the muscle thoroughly, until it is perfectly flaccid. A thorough kneading, until we cannot recognize a contraction, will give much more satisfaction than the most forcible stretching and relaxation without the kneading. The presence of a polyp is not infrequently met with, although not very common. Only a short time ago I met with one suspended by a very large pedicle — about an inch in length. This was associated with an old retroversion.

Dr. Barret.—Dr. Ford has gone into the subject very exhaustively indeed. Although I don't suppose he means to say that all cases of fissure should be subjected to the identical plan of treatment which he has laid down, still there is no question that a good many of these troubles will not yield to simple treatment. I know that the method of curing ulceration of the rectum by division of the superficial fibers and stretching is made very rosy, and appears very easy, and it is said to be always successful by the same authorities. I know from my own experience that it is true that these ulcerations are very common, and that their successful treatment depends very much upon the etiology. The ulcer is occasioned, as Dr. Prewitt has suggested, by a rupture in the mucous membrane. Now the rupture depends upon different conditions: whether there is rectitis present; whether the discharges from the rectum are vitiated and irritating, setting up an unhealthy condition of the mucous membrane. The same condition is caused by vaginal discharges—the vaginal discharges run down over the anus and inflame the skin, and it becomes pultaceous and soft. The mucous membrane about the anus, where it begins to be skin, is kept in a state of chronic inflammation by contact with the irritating discharges from the vagina, and because of its inflamed condition becomes very easily torn when it is distended by hard fecal masses; and because of its inflamed, irritated condition these ruptures fail to unite, and degenerate into ulcers which we call fissures. Another way in which I am satisfied fissures frequently occur—or rather one reason why they are more common in women than in men—in addition to the presence of these vaginal discharges, is that they are produced

in labor. In one case I saw a rupture produced in that way. I was watching very closely, and was trying to protect the perineum, and I saw a rent begin in the rectum — not in the vulval orifice, but in the rectal orifice—and split up as if cut with a knife for at least half an inch, without going to the vulval orifice. I think the woman had rectitis, or that she had ulceration of the rectum due to syphilitic trouble; and when the head on the perineum distended it, it very naturally tore, commencing, not at the vagina, but at the rectum. I think this is a very frequent source of fissure. These tears occur in consequence of the distension of the rectum which takes place during labor, and the associated discharge that occurs afterwards prevents its healing. Now the pain that results from these fissures or ulcers of the rectum differs in character. Sometimes there is a spasm of the entire muscle, but in the great majority of cases there is simply a teasing, burning, annoying pain, due to the contraction of the superficial fibers of the sphincter muscle; one fiber contracting, then another, alternately. Where pain of that kind is present, or where there is simply a burning in the rectum, I think a thorough stretching or division of the superficial fibers will in the majority of cases, if done thoroughly, result in a cure. Dr. Ford suggests that we should never divide the muscle entirely through. In cases where I have operated, I have always operated very thoroughly. So far as stretching is concerned, we can only stretch until the fibers give way. In several cases I have not succeeded in curing by stretching. I have never succeeded in stretching it so thoroughly that the reflex contractility was entirely destroyed. At the most in a day or two, if you introduced the finger or a speculum, the sphincter displays its reflex contractility. I am satisfied that in some severe cases, and certainly in such cases where there are irritating discharges which prevent the healing of the wound, the section must be thoroughly made to effect a cure.

Dr. Prewitt.—It seems that Dr. Coles misunderstood what I said about dividing the superficial fibers. I don't expect to paralyze the sphincter by doing that. As I stated, a fissure of the anus is an irritable ulcer. It is painful, because it is irritable. It isn't painful simply because the sphincter is constantly acting, but it is painful because it is an irritable ulcer. These

irritable ulcers are always painful. You may have them anywhere, and they will not heal oftentimes until there is a complete alteration of the surface. It is necessary sometimes to destroy the surface before you get them to heal. Billroth refers to a case where there was extensive ulceration of the thigh, which was painful and which he only relieved by using the actual cautery; and so it is with ulcers elsewhere. But the ulceration which exists in these cases comes from the tearing of the mucous membrane. It is usually superficial. It gets in this irritable condition and is kept up by a constipated habit, very often, and when you have over-distended the sphincter you get rid of the irritability of this condition and start a healthier action of the ulcer. You set up healthy granulations, and the sore heals well as a simple ulcer. The cutting is done to give the granulation an opportunity to begin; and, as I said before, although I have never tried it, I believe that in the great majority of cases if you simply take a curette and scrape the surface of the ulcer and set up a healthier action, you will cure the trouble without cutting.

Dr. Maughs.—I wish to say that I really don't see what possible connection the paper of Dr. Ford, or any of the arguments, have to do with an obstetrical or gynecological society; and in saying so I don't wish to detract a particle from the worth of the paper which the doctor has read. As a treaties on diseases of the rectum, it is very able and well timed, but all that is said in it will apply just as well to a man as to a woman, It is a mere accident if the person affected with this trouble has a vagina and has nothing to do with the disease. It is true that women are very liable to have diseases of the rectum, not because they have a vagina or a uterus, but because of their sedentary habits. Fissure of the rectum is more dependent upon derangement of the portal circulation than it is upon the uterus. The impaired circulation during labor produces necessarily a congestion of the hemorrhoidal veins, and this with their sedentary habits produces disease of the rectum. I had a most interesting case of a female patient who was sent to me from a distance to be treated for uterine disease; and on examination I discovered no uterine trouble, but there was disease of the rectum; and I diagnosed fissure and ulceration,

and told her that I would give her chloroform and paralyze the sphincter.

Dr. Papin.—But you had to examine the womb before you discovered that there was no uterine disease?

Dr. Maughs.—She came to me to be treated for uterine disease, and I examined her as a matter of course; and I discovered that she had inflammation and ulceration of the rectum, and knowing Dr. Ford's experience and ability, I went up and got him to go with me and see the patient. The treatment he mentions was instituted and was successful; the woman was relieved, and would have been just as much so if she had been a male instead of a female. There was neither retroversion nor anteversion of the uterus; there was a slight anteflexion, but the disease was not in the least dependent on it—it would have occurred just as readily if she had had no uterus. I treated her for the disease of the rectum and the patient was sent home cured.

Dr. Papin.—I believe that Dr. Maughs misunderstood the purport of my question. I meant to ask in regard to this patient, who came from the country to be treated for supposed uterine disease, whether before he examined her, when he took cognizance of the subjective symptoms, the reflex from the rectum did not simulate some trouble of the uterus—some trouble of the reproductive organs, from which it became necessary for him to make a thorough examination before he was satisfied that there was no uterine disease, and that the disease must be found somewhere else.

Dr. Ford.—I want to say a few words more, and I shall make my remarks as brief as possible. I am sorry I cannot agree with Dr. Maughs with regard to the relevancy of this subject to gynecology. Dr. Maughs did not hear the first part of my paper. I endeavored to show the relationship existing between uterine and rectal diseases, and conversely. The object of the paper is to call attention, as Dr. Barnes has so instructively done, to the interdependence of these diseases. The influence is an etiological one, as Dr. McPheeters has said, and in both directions; and it is an influence which is scarcely adverted to in the text-books. It is not spoken of in Thomas' book at all. This author only mentions the effect of uterine displacements in producing rectal troubles in one or two lines.

Emmet follows Scanzoni, who clearly sketches the subject, but only in a dozen lines, which I have quoted in full. The only object of the paper is to show the etiological relationship of diseases of the rectum and of the uterus. So far from being at all foreign to gynecology, I think this subject is one of the very highest consequence, which, as far as the influences considered affect the pelvic organs of the female, should be continually borne in mind by the gynecologist. Barnes has evidently been impressed with the fundamental importance of these matters, and has made them the subject of the valuable lectures which have been quoted by me. I must also take issue most distinctly with the tone of the discussion on the part of several of the disputants, who seem to me to have directed their attention far too exclusively towards the mere cure of fissure, as such. What we really have to do in these cases is to relieve the condition of sphincterismus, upon which the rectal irritation is based, and which is the cause as well as the effect of the fissure. The rationale of treatment is to abate the sphincterismus; when this is done the rectitis will be amenable to treatment, and not otherwise, and the fissure will heal readily under usual modes of treatment.

Dr. Prewitt.—I would like to ask the doctor, if the object is to paralyze the sphincter, what is the use of cutting and stretching both?

Dr. Ford.—We stretch in order to get a certain amount of division, and to make the incision as small as possible.

Calculus in the Female Urethra.

Dr. Papin.—I have a specimen to present which is perhaps of a little interest. I saw the patient—a German woman—on Sunday for the first time, and she was troubled with retention of urine. I passed a silver catheter into her bladder, and drew off her urine, which was mixed with blood. I discovered at this time that there was a stone in the bladder, and told her so. But she said no, that all the doctors who had examined her for the last seventeen years had told her that there was simply a catarrhal condition of the bladder. That existed undoubtedly, but I told her I thought that it was due to the presence of a stone, but she couldn't be made to believe this. The remedies that I prescribed for her on last Sunday seemed to have given

her some relief. I ordered, for instance, carbonate of lithium, an idea which I had gotten from Dr. Hodgen some years ago; and it really gave her some relief, but it was only partial. When I attempted to catherize the patient again, for the purpose of washing out the bladder, I found that the urethra was stopped up with a stone, so that it was impossible to introduce the catheter. She stated that only a few minutes before she had voided her urine. I was quite unprepared for the condition of affairs that I found, but, as is my habit in such cases, I took in hand what I had to relieve the patient. With a little bistoury, that I carry usually in my pocket, I dilated the urethra laterally and cut it, and then taking the ordinary dressing forceps used in gynecology to wipe off the neck of the womb with cotton, I passed this forceps into the urethra, through the cut I had made, and removed this stone, which is nearly as large as a pullet's egg. She said that she had been troubled with this thing for seventeen years. She is familiar with almost all forms of diuretics, and she mentioned some that I had not heard of. There was some difficulty in withdrawing the stone. We were alone in the room, and I got her to hold the vulva open. When the stone was partially extracted she begged me to give her some rest, but I was anxious to get it out, and remembering what Dr. Pope had said in relation to the dilatability of the urethra—how much it could be dilated, I did not hesitate to sway it with the forceps from side to side in an attempt to dilate the urethra, and I got out the stone.

Dr. Coles.—Had she been able to pass her urine voluntarily?

Dr. Papin.—Only a few minutes before I took this stone out she had passed her urine. She said the little black drops (McMunn's elixir of opium) I gave her afforded very much relief. The patient was forty-five years of age. I remember some years ago being called to Broadway and Mullanphy streets to see a patient who could not pass her urine. She had attempted to pass her water and found that she could not; it had stopped all at once, and since that time she had only been able to pass a few drops of blood. With the assistance of her husband I parted the vulva, and the first thing I touched was a stone which filled the urethra. I took a pair of forceps, and with a great deal of trouble, removed a portion of it, the stone having broken and part of it being left. I was afterwards called again

to see this woman for the same trouble and removed the rest of the stone. By putting the two pieces into juxtaposition they just fitted together and formed an elongated mass about two inches long, shaped like a pipe stem. Under no circumstances would they allow me to take the stone away from the house.

Dr. Maughs.—This raises an interesting question, and one that has been discussed a great deal, and that is the liability of incontinence, following from dilatation of the urethra. I would like to know if there was incontinence in these cases?

Dr. Papin.—Speaking of dilatation of the urethra reminds me of the case of a girl twenty-six or twenty-seven years of age, who was a patient of Dr. Montrose Pallen, at St. John's Hospital. For some reason or another he was obliged to go to New York, and he placed her under my charge. Some time before he left he proposed to me, in her presence, to cut the bladder open through the vagina, so as to induce incontinence of urine. She had a very severe inflammation of the bladder, and a large quantity of mucus and pus was passed. She almost lived on laudanum—we gave her large doses of laudanum, 30–40–50 and 60 drops. She heard this consultation, to which I demurred a great deal. One day, when Dr. Pallen was in New York, she came into the clinic with a bottle of chloroform in one hand and a knife in the other, and said: "Dr. Papin, I heard you and Dr. Pallen talking about this thing, and I am determined that if you do not do it I will cut it open myself; this bladder must be relieved." As she had a good deal of temper, I said, "Very well, you get on the table, and I will chloroform you and open the bladder." She insisted that I should promise to perform the operation, and I said I would relieve her. I did not propose to do any such operation, but I dilated the urethra until I produced perfect incontinence of urine, and when she recovered from the effects of the chloroform, she expressed herself as much relieved, and she supposed that I had really opened the bladder. Four or five days after this dilatation she again came into the clinic, walking perfectly erect, and I asked her how she felt. She said she was no better. I said, but you are walking erect. I again gave her the chloroform and dilated the urethra, and relieved her for 4, 5 or 10 days again. This complete dilatation was repeated three different times and re-

sulted in complete recovery, not only from the immediate effects of the dilatation, but also from the cystitis from which she was suffering, so that she has been able to do hard work at service since, and has been in my own employ a good deal.

[Dr. Papin informs us that the patient from whom he removed the calculus has entirely recovered from the operation, and also from the troublesome cystic disease.—ED.]

INTERNATIONAL MEDICAL CONGRESS.—The eighth International Medical Congress is to be held in Copenhagen Aug. 10–16, 1884. The General Organizing Committee, formed for preparatory work, is composed of the following members, living in or near Copenhagen; *President*, Prof. Dr. P. L. Panum, *Secretary-General*, Prof. C. Lange; *Secretaries*, Drs. O. Bloch, C. J. Salmonsen and Surgeon-General Joh. Moller; *Honorary Treasurer*, Prof. Dr. E. Hansen Grut, together with the presidents of the special committees of sections, numbering fifteen. The other members of these special committees have been selected in part from other Scandinavian countries than Denmark.

Communications have been sent to physicians prominent in different departments in different countries, in order to prepare a program. This program we shall present to our readers in due time, or the program and rules will be forwarded, when prepared, to everyone qualified to participate in the Congress who shall announce to the secretary his interest in the Congress and his intention of participating in it.

Through the courtesy of Dr. W. A. Hardaway we have the provisional program of the section on Dermatology and Syphilis:

List of Subjects for Communications and Discussions: 1. Syphilitic Origin of the Tabes. 2. Treatment of Syphilis with Mercurial Injections. 3. Excision of the Initial Induration as Abortive Treatment. 4. The Etiology of Leprosy. 5. A New System in Skin Pathology. 6. The Etiology of Lupus Vulgaris. 7. The Term of the Infectiousness of Gonorrhea. 8. The Significance of Micro-organisms in Skin Diseases formerly regarded as non-parasitic.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

ENGLISH MEDICAL DEGREES.—ELECTRICAL HUMBUGS.—ANIMAL ELECTRICITY.—THE STATE AND SCIENCES.—STUDY OF HYGIENE.

LONDON, October, 1883.

All the medical schools have just re-opened for the winter session. It is too early a date at the time of my writing this letter to tell you the actual number of fresh students commencing their medical education this year in London. Most of the new entries take place in the first fortnight in October. In the Scotch universities and medical schools the session does not commence until the middle of November. During the past academical year the Victoria University, situated at Manchester, has obtained the right of granting medical degrees. There is, therefore, a likelihood of a large increase in the entry of students in the medical faculty of Owen's College. Owen's College is in Manchester, and with the College of Science at Leeds at present forms the Victoria University.

A University degree of M. D. confers a right to the title of "Dr.," one, to all appearances, much coveted by medical men. In England comparatively few practitioners possess this title. Its acquisition requires a much extended course of study and the passing of far harder examinations than is required for obtaining the ordinary diplomas. In Scotland and Ireland the degree of M. D. is obtained on much easier terms. It remains to be proved on what terms the Victoria University will grant its degrees. To the public every degree, no matter from what source derived, is of much the same value. This lack of uniformity in requirements and disparity in value of the several medical degrees will be to a great extent rectified by the passing of the Government Medical Bill next session.

This country has lately been flooded with "magneto-electric" appliances and "galvanic generators," mostly of Ameri-

can manufacture, and the testimonials accompanying the sale of these articles are mostly dated from America, and therefore beyond the reach of verification. These articles are sold at absurdly high prices and constitute the grossest form of imposture. The public have very little means of knowing whether the virtues claimed for them are real or otherwise.

They generally consist of pieces of magnetized steel concealed in the back of a hair brush, or between two folds of flannel made into the shape of a belt, and are called "magneto-electric hair brushes," or "magneto-electric belts." Now, there is only one way in which electricity can be obtained from a magnet, that is when a substance capable of conducting electricity is moved in the field of a magnet, or, what is the same thing, when a magnet is moved in the neighborhood of a substance capable of conducting electricity. In the case of articles, such as belts or corsets, worn on the body, these conditions are not present, because the magnet moves with the body, and in the case of brushing the hair the magnet is moved in the neighborhood of an eminently non-conducting substance, viz. the human skin; the resistance offered by the skin to the passage of electricty is so great that it may almost be called a non-conductor. The vendors of these articles pretend to show their power by the effect produced upon a compass. All magnets, of course, affect a compass, but a compass is not a galvanometer, and the fact that these articles will influence a compass is not proof that they produce electricity. The cures accredited to the wearing of these articles are either due to "faith," or the flannel in which they are encased.

At the meeting of the British Association for the Advancement of Science, held at Southport, at the end of last month, Prof. McKendrick, of Glasgow, gave a most able and interesting lecture upon Animal Electricity. Prof. McKendrick is well-known for his researches in physiology. At the conclusion of his lecture, in summing up the information he had acquired by his experiments, he said that it was no part of the functions of nerves, muscles, or of the retina of the eye, to produce electrical currents under the action of their relative stimuli; but such currents indicate chemical changes in the organs or tissues. For example, the contraction of a muscle is a movement following or consequent upon many chemical

changes, among the results of which were the production of heat and differences of electrical potential. Thus, there was no special production of electricity except in the cases of electrical fishes, and possibly of some other animals. In most animals, including man, the production of currents was an incidental phenomenon, indicating chemical operations and nothing more. Besides, the currents so produced were feeble and evanescent, and bore no relation to the general well being. Consequently, all attempts to influence the living body by magnets had no rational basis. Prof. McKendrick thus denies the existence of any center or apparatus for producing electrical separation in the human body, although it has been thought possible, by many scientific men, that such a center does exist.

Another address before the British Association has attracted considerable attention, and that is the one delivered by Prof. Ray Lankester, in which he advocated the endowment of research by the State. It is a doubtful question whether it is the duty of the State to subsidize science. It would be much better if sufficient funds could be obtained from other sources. Prof. Lankester showed that, 250 years ago, Sir Thomas Gresham left the city of London a large amount of property for the purpose of scientific research. About 100 years ago this property, by an Act of Parliament, was appropriated by the corporation of London and the Mercers' Company and devoted to other uses. The value of the property is now about three millions sterling. It is true that the corporation have instituted a course of lectures on subjects allied to medicine, which are delivered yearly, and called the Gresham lectures, but the cost of providing for these lectures is very small indeed. As far as the State is concerned, there is no doubt that the people are already sufficiently taxed for the support of the army and navy, and for the due administration of the law. These things are necessary, but already much dissatisfaction is expressed at the increasing annual votes of money for educational purposes and the support of museums, libraries and schools of art. These institutions are of great benefit to those able to take advantage of them, but it would be much better could they be supported from private sources.

I see by the hand-books and guides to the different hospitals issued this year, that systematic instruction in the science of

hygiene has been added to the curriculum of most of the medical schools, and arrangements made for preparing candidates for the several examinations in Public Health, lately instituted by the universities and medical corporations. These examinations embrace physics and chemistry, so far as is necessary to understand the application of the general laws to such cases as occur in the practice of medical officers of health. Candidates are not expected to show an acquaintance with those details of chemistry which have no direct bearing on sanitary questions, but are expected to be conversant with methods of analysis, especially those used for analyzing air and water. It is not expected that officers of health will generally be able to act as public analysts, but that they will be able to interpret correctly the results of professional analysis, and know how to apply the ordinary chemical tests for the detection and discrimination of mineral and organic impurities. Instruction is also to be given in the use of the microscope, in detecting the adulteration of food, such as the various forms of starch used to adulterate wheat flour, the classification of food substances, various classes of foods, dietaries, and the disease produced by bad food; the laws of heat; the principles of ventilation and the appliances used in natural and artificial ventilation; the materials used in warming and lighting, and their effects on the air; the sources of water supply, measurement of available supply, modes of storage and distribution; systems of drainage and disposal of sewage, and sanitary engineering in general.

Arrangements are to be made for admitting architects to part of the course I have mentioned above, which also includes the construction of dwellings. Students are also to be taught the laws of the realm relating to public health; the origin, etc., and prevention of epidemic and infectious disease; the effects of overcrowding; unhealthy occupation and the diseases to which they give rise; nuisances injurious to health; the distribution of diseases within the United Kingdom, and the effects of soil, season and climate. The course of instruction and subjects for examination include many other points which have bearing upon the public health, but I have mentioned sufficient to show you that a great deal will be required of the students, and that the examinations will be of a most searching character. E. V. A.

BIRMINGHAM LETTER.

British Ovariotomists.

Birmingham, Sept. 15, 1883.

Editors Courier—We generally expect to find the greatest skill in the largest towns, but like other rules there are some exceptions to this. For instance, in the treatment of fractures, dislocation or hip disease, I doubt if any one has had greater success than Dr. H. O. Thomas, of Liverpool, with his peculiar splints. In general surgery I know of no one in London who has had greater success than Gamgee or Furneaux Jordan, of Birmingham. And I am confident that no one has had greater success in the surgical diseases of women than Lawson Tait. Having had the privilege of seeing his operations for the last ten weeks, I thought it might be of interest to those of your readers who are interested in ovariotomies to know something of his methods.

The greater part of his operations are performed at his own private hospital, where he has excellent apartments fitted up for nearly forty patients; but he has quite a large number also at the woman's hospital, which is practically a free institution. At this hospital there are several detached cottages of one room each, which are very lofty and well lighted from the south. The patient is kept in the cottage about a week, and if she is then going on all right she is removed to the main building. At this hospital there are two operating surgeons, Dr. Thos. Savage being the senior, and Mr. Lawson Tait the junior surgeon, operating alternately.

The other day I asked Dr. Savage to what he attributed his and Mr. Tait's success, for they are very similar in their methods and have much the same results, and he replied: "It can all be summed up in three words: 1st, cleanliness; 2d, dryness, and 3d, dexterity." To which I would add "carefulness."

The first, "cleanliness," brings up the question of antiseptics, which can be disposed of in a word: neither of them uses them. I may have something to say on this subject in a future letter, but from what I have already seen, I must say that my confidence in Listerism has been very much shaken. Tait uses nothing but pure water, but Dr. Savage does use a little car-

bolic acid in the water in which his instruments are placed. The instruments and sponges are of course scrupulously cleaned and plenty of water is used from beginning to end, but this is all the antiseptic that is used. There is no oiled silk or anything of the kind placed over the abdomen, but the parts are sponged thoroughly clean before operating. There are only four persons who take part in the operation: the operator, his assistant, and two nurses to manage the sponges. The nurses have to redress before coming from the other patients, and in fact everything is done that can possibly be done to insure absolute cleanliness. If there are any visitors present they are required to sign a certificate to the effect that they have not attended any post-mortem examination or contagious diseases for six days.

Perhaps no one has done more to advance ovariotomy than Mr. Baker Brown. At the same time one rule which he adopted did very much to keep back the success to which the operation has now attained. That was "Never sponge the peritoneum." No matter how much "blood and corruption" was left, rather leave it than touch the peritoneum with a sponge. Never was a greater mistake. Before the peritoneum is opened the external bleeding is arrested with Koeberle's scissor-shaped artery forceps, which are left on until it is necessary to complete the operation, when it is found that, as a general thing, all bleeding is stopped. Just as soon as the peritoneum is opened, sponges are inserted *ad libitum*. I have seen as many as twenty sponges in the abdominal cavity at one time. Before closing the incision, dry sponges are put in and taken out until they finally come out dry and clean, so that the old rule "don't sponge the peritoneum" has been replaced with the opposite—"sponge until perfectly dry."

Dexterity, of course, is requisite in all surgical operations, but especially is this so in abdominal sections. Here the fingers ought to both "see and feel." Mr. Tait is renowned for his short incisions. As a rule he seldom makes an incision longer than an inch and a half in simple ovariotomies, or the removal of the appendages. With this small opening, barely large enough to admit his two fingers, he diagnoses the case and generally completes the operation. From what I have seen, and judging from a discussion that has just taken place

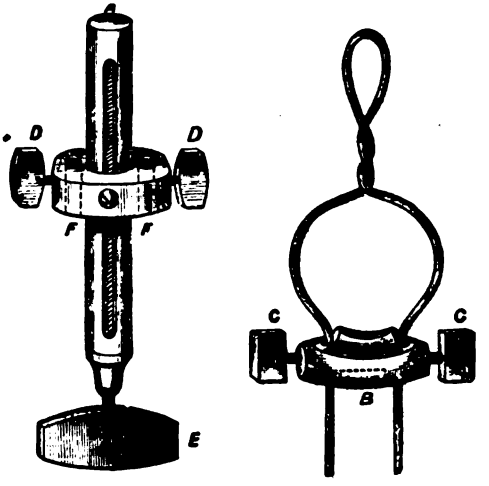
in the *Lancet*, I am led to believe that no one ever attempts to perform the operation with as small an opening as Lawson Tait. He is remarkably skillful with his fingers, not only in abdominal sections, but in every other operation that I have seen him perform. Mr. Thomas Bryant, the London surgeon (who came all the way from London to see him operate), remarked to me the other day that for a clever (in the English sense) surgeon he considered Sir Spencer Wells the most unskillful, while he thought Lawson Tait the most dexterous of operators.

Carefulness in little things has much to do with success. In every operation there are the same number of instruments, the same number of artery forceps (12) and the same number of sponges (either 12 or 20). When the operation is about completed, and the sutures ready to be tied, the nurses have to count the sponges, etc. This of course is absolutely necessary, for it is a very easy matter to leave a sponge in. Several times I have seen the operator search the abdominal cavity for some time before a sponge could be found, which was known to be there only from counting them. The anesthetic used is bichloride of methylene.

His method of treating the pedicle is the intraperitoneal, after ligating with silk. He uses a peculiar double-knot for tying the pedicle, which for lack of a better name I would call the Tait knot. The advantages of this knot are, that while the whole is compressed into one surface it ties the pedicle in two halves, and at the same time these halves are equally well compressed, so that very great constricting force can be employed. To tie with this knot a long-handled needle is threaded with the silk required, and pushed through the center of the pedicle. The needle is then withdrawn and a loop left on the opposite side of the pedicle. Then the loop is drawn over the tumor or ovary, and one of the free ends drawn through it, so that one end is above, while the other is under, the retracted loop. Both ends being seized, they are drawn through the pedicle, till complete constriction is made. A simple hitch is then made and tightened as in an ordinary ligature. The pedicle is then cut about a third of an inch from the ligature. This intraperitoneal method of disposing of the pedicle was a long while in being adopted, but it has been the means of re-

ducing the mortality at least fifteen per cent. And while without doubt an American, in the person of Ephraim McDowell, of Kentucky, was the first to perform an ovariotomy (although Sir Spencer Wells claims that honor for Robert Houston, of Edinburgh, whose operation, judging from his own account of it, was only tapping and removing the contents), so America can claim the honor of having first used the intraperitoneal method, as Dr. Nathan Smith, of Connecticut, used this method in his first operation in 1821. There are times, however, when the clamp must still be used. But in all the operations I have yet seen, I have only seen the clamp used five times, four by Mr. Tait and once by Dr. Savage, the latter a Porro's operation and the removal of a six months child. The clamp used was the one invented by Mr. Tait, and is so ingenious and practical that I send you a description of it.

The wire used to encircle the stump is copper, nickeled, and and about an eighth of an inch in diameter. This is bent into a loop, as is seen in the right hand figure. After it is placed



around the pedicle the collar B is put on as far as it will go. The handle A E is then run on the ends of the wires, running in the holes F F, and the end A comes against the collar B. The screws D D are then tightened and the handle E is turned till the loop of wire firmly contracts the pedicle. This it does

very thoroughly, and stops all bleeding after the tumor is removed. When the tumor is removed and it is obvious that it will not require any further tightening, the screws C C are securely tightened down to the wire, and at D D loosened. The handle will then come off and leave the wire and its collar as seen in the right hand figure. Powdered ferri perchlor. is now put on the stump, which acts as a further preventive of bleeding and also as a disinfectant.

During the ten weeks I have been here Mr. Tait has operated 65 times, with only one death. The fatal case was a cancer case and the operation was a *dernier ressort*, and the woman died in twelve hours. Thus, throwing out this case, which really ought to be thrown out, we have sixty-four consecutive cases in ten weeks without a death. When we think what was the rate of mortality only a few years ago, when we expected at least twenty out of every hundred to die, we may well rejoice at the results of the present methods. It makes it possible and advisable to operate quite often now for a comparatively quite harmless lesion or tumor, which otherwise would be continual annoyance and worry to the patient. I have in my note book the history of a case which illustrates this. The woman had suffered for ten years with an almost continual pain in her right side, not very severe but bad enough to make life a burden. Menstruation regular but very painful; coition during the last three or four years very painful and almost unbearable. A month ago Dr. Savage removed the right ovary, and to-day she is a perfectly well woman. I could refer to other cases, but this letter is already too long.

G. H. SIMMONS, M. D.

DR. E. C. GEHRUNG, our esteemed friend and contributor, long and favorably known as a gynecologist in this city, has, on account of ill health, taken up his permanent residence in Denver. We bespeak for him a cordial reception by our colleagues in that section, and trust that its genial climate will speedily restore him to his accustomed usefulness and activity in the profession.

COMMUNICATIONS.

Editors St. Louis Courier of Medicine. *Gentlemen:*—On my return from the country a few days ago, I looked over the exchanges which had accumulated during my absence, and among others came across the August number of your esteemed journal, with the paper on the "Management of Abortion," by Dr. Walter Coles, and the discussion on that paper in the St. Louis Obstetrical Society. I was very much interested in both, and am pleased to hear so many able opinions expressed on the opposite side. I feel flattered that my humble article on the same subject should have elicited so much notice and criticism. It is not my intention, however, to discuss this topic again here or elsewhere for the present. My paper was based on convictions drawn from my own, I think sufficient, experience, and I felt that I had the "courage of my opinion," and was justified in giving utterance to it. The same, no doubt, is the case with the gentlemen who differ from me, and thus I trust we may both profit by each other's experience. Neither of us, it is to be hoped, will have the assurance to claim that his belief is always right, and that of his opponent always wrong.

But I wish to beg a little of your space to correct some misunderstandings into which, incomprehensibly to me, Dr. Coles and his supporters seem to have fallen.

1. Dr. Coles accuses me of a lack of fairness, in my paper, toward those who hold more conservative views, and assumes that I recognize no intermediate ground between the "do-nothing" and "let-alone" policy and the "heroic measures" recommended by me.

Herein he is entirely wrong, for it will be seen by the following sentences taken from my paper that I limit the so-called "heroic measure" of removing the placenta by the fingers or curette to certain well-defined conditions: "I wish to add my testimony to that of Dr. Alloway * * * * * *in favor of the forcible (that is manual or instrumental) removal*

of the secundines immediately after the expulsion of the fetus, in every case where the cervical canal is sufficiently patulous to permit the introduction of the finger, or of the large dull curette, or the placental forceps." Further, "*if there is hemorrhage, or an offensive vaginal discharge, or if the temperature rises, or there is a chill, and the secundines are still retained, no matter how soon or how late after the expulsion of the fetus, they should be at once removed, and, if necessary, the cervix dilated to facilitate the operation.*" (Italics as in original article.)

It is evident, therefore, that while I certainly favor the immediate removal of the secundines after abortion, I limit this practice entirely to cases where the cervix is dilated, where urgent symptoms demand its removal, and where (as stated in a subsequent sentence, also in italics) "*such removal can be accomplished without sufficient force to injure the woman.*"

Where more than *safe* force is needed—violence, indeed—no one objects more than I do to its employment for this or any other similar object.

That I have not *always* advocated the *immediate* removal of the secundines is shown by my table of cases, twenty-seven of which occurred in my own practice (not in consultation), the placenta being allowed to remain for periods varying from several hours to two months. It was precisely the annoying and dangerous results of thus allowing the secundines to remain until urgent symptoms arose which induced me in the course of years to adopt and practice the principle of their immediate removal whenever practicable.

As regards the charge of lack of fairness, I am sure I have no desire to interfere with the opinions and practice of others. I did not *insist* on *immediate* removal in *every* case, but limited it to certain cases, leaving a wide field still for the expectant method. Nowhere do I state, as Dr. Coles says, that I "follow this practice to the exclusion of what is ordinarily known as the expectant plan."

Indeed, some years ago, before I had the curette, I tamponed a patient twice daily for four days, and gave ergot before the placenta was expelled. But I feel that I inflicted much more pain on her, and that she suffered quite as much or more danger, than if I had at once curetted out the placenta.

I think the above italicised passages, quoted from my paper, sufficiently show that I admit of exceptions to the rule of immediate removal. But I cannot withdraw from the position which my experience has forced upon me, that if the cervix permits of the immediate removal of the secundines by fingers or curette, without undue force, this practice is in no way hazardous, and the patient is at once relieved of future anxiety and danger in regard to her case.

2. Dr. Coles claims that my table of cases does not illustrate the "immediate delivery of the secundines, as in thirty-nine, or upward of sixty-eight per cent. of my cases, they were delivered after the lapse of from twenty-four to sixty hours." Herein he is right, but I explain this by the fact that in these cases I did not see the patient sooner. And, besides, my table does not refer to the *immediate*, but to the *artificial*, removal of the secundines, for the good reason that the cases there reported were instances of early or late removal of the secundines, as I happened to see the case. These cases were published for the express purpose of illustrating and emphasizing the *necessity for the immediate removal, in order to avoid the dangers caused by retention of even a few hours.* Why my statistics, therefore, "contain no data sufficient to warrant any decidedly new departure in practice, or as bearing on the special points advanced in my paper," as Dr. Coles has it, I fail to see. To me the bearing on the special point I wished to make, the danger of retention, is clear enough. A "decidedly new departure in practice" I did not desire to make, as the practice is by no means novel, but has merely been neglected.

That the "chief peril of the aborting woman is *inflammation*," as Dr. Coles asserts, is certainly not my experience or the result of my reading. So far as I am aware, her chief perils are *hemorrhage and septicemia from retention of the secundines.* Para-uterine inflammation (cellulitis) is occasionally met with as a secondary result, but no more after active removal of the secundines than when they are retained and discharged in a more or less decomposed condition. My table of fifty-seven cases, to which I have five new ones to add, of *early* removal of the placenta (all in consultations, hence not immediate, and all successful), thus sixty-two cases, shows pretty conclusively that the removal of the secundines is not a very dangerous

procedure. That the immediate removal is more difficult I admit, but I have failed yet to meet with a case of injury thereby produced.

4. With the exception that I favor the immediate removal, *whenever practicable and safe*, I do not see but that Dr. Coles and I agree on the main points of the management of the secundines after abortion, and I do not believe that, on due reflection, and with some allowance for the brevity and concise character of my original paper, he will find so much to criticise and condemn in my views as he has thus far done. At any rate, if my paper has done no other good, it has served to elicit the very able, and, on the whole, generous critique on which this communication is based. Now, a word about the discussion on Dr. Coles' paper, Messrs. Editors, and I have done. The members of the St. Louis Obstetrical Society who expressed their views on this topic did so, it seems to me, very much in the same conservative spirit to which I have become accustomed in our general societies here That is to be expected; I respect their views, and I shall not endeavor to refute arguments which satisfy those who utter them so well. One gentleman, who had a vision of "men going about scooping women's uteri because they have aborted," seems to have been needlessly excited. I assure him there is no such danger as he fears. Those of us who "scoop women's uteri" after they have aborted of the fetus, and to remove the secundines, know what we are about, and choose our cases. But I cannot refrain from expressing my admiration for the exquisite and delicate irony in the remark of Dr. G. A. Moses, that he is "satisfied that when Dr. Mundé reads the discussion of his treatment of retained placenta, and hemorrhage from abortion, he will entirely change his opinion and practice." And that it "seems to him probable that many of the cases to which he (Dr. Mundé) is called in consultation in New York, with men who become frightened, are such that by the time he is called in the placenta is just in the right condition to be expelled, as we often see, and all he has to do is to take hold of it and remove it; and the use of the curette in these cases, if he uses it, is improper."

The irony in these remarks of Dr. Moses is so subtle that one might almost take them seriously. I will not do Dr. Moses

the injustice to assume that he really meant that I would at once retract what I had written as the result of the experience of years, and abandon a practice which I know and believe to be right (in principle, at least), merely because a number of gentlemen saw fit to differ with me. And he surely cannot intend to imply that I do not know whether a placenta is adherent or not, or when a curette should properly be employed, or that New York physicians are so easily frightened. I prefer to look upon these remarks of his in the light of a joke, rather than to believe him capable of the questionable taste of making them in earnest.

Accept, Messrs. Editors, the assurance of the esteem in which I hold the profession in St. Louis, and believe me to be

Sincerely yours,

PAUL F. MUNDÉ.

20 West 45th St., New York, Oct. 5, 1883.

PLACENTA PREVIA.

LANCASTER, IND., Sept. 13, 1883.

EDITOR COURIER:—I was called, June 7th, to see Mrs. E., æt. 35, mother of four living children, and having had one abortion. Patient was suffering severe uterine pains, and gave a history of violent "flooding" before my arrival.

Examination.—Slight hemorrhage; uterus enlarged; os dilated, allowing introduction of finger. Finger came in contact with a soft, granular-feeling mass, which I decided was the placenta. (Patient claimed to be five months pregnant.) In making pressure, I found the central portion of the placenta movable, but no appreciable detachment around circumference. My office being within easy distance, I decided, under existing circumstances, to enjoin quiet, and wait events.

Slight hemorrhage continued till June 29th, when I was hurriedly sent for. Patient again "flooding." Examination discovered a large mass partially within vagina, which I readily determined to be the placenta. Pains becoming expulsive, I waited to see what Dame Nature's object was. Examining during a pain, I found the placenta descending, closely fol-

lowed by a body of irregular outline, which I supposed was the fetus, but could not make out the position. When the placenta was presenting at genital fissure, I found that it was very intimately connected with the fetus, and they were expelled almost simultaneously.

I then made out the position. Child presented by the breech. Thighs drawn closely to the abdomen, and the placenta covering the posterior surface of their upper part—the fissure between the nates being obliterated by the placenta, making the difficulty in diagnosis of position. The umbilical cord did not measure quite two and a quarter inches. The *membranes were not ruptured.* I ruptured the membranes carefully, and the child made slight movement, but never breathed. Its size indicated a five months' fetus. Mother made a good recovery.

I report this case as having some points of interest:

1. The ease in making a diagnosis of placenta previa by the impression conveyed through the sense of touch, no other structure imparting the same sensation.
2. Nature's tampon, to arrest hemorrhage.
3. The length of umbilical cord; and
4. Escape of fetus of that size with membranes entire.

It is the opinion of the writer that waiting, in this case, was safer than any mode of interference, and it is doubtful whether the placenta could have been displaced, owing to length of cord and relation to position of child. In the majority of cases, I think the induction of premature labor not only justifiable, but necessary.

GEO. T. MCCOY, M. D.

WHAT A COUNTRY DOCTOR KNOWS ABOUT MARITAL EXCESSES, ETC.

EDITOR COURIER:—I was very much interested with the discussion, in the August number of the COURIER, on Marital Excesses.

I am very much of the opinion that a great deal of the disease of the female genito-urinary organs is produced by the

husbands. The frequent connections, I was about to say ravishing, to which the wives of a large number of husbands are compelled to submit, brings about a shock to the system, which they are not allowed to recover from till they are subjected again to the same cause, thereby impairing nutrition, lowering vitality, and bringing about, sooner or later, some disease to which the woman may have some hereditary tendency, but which otherwise she would have escaped. For instance, I know a man, of a strong, muscular frame, and by the way of a neurotic tendency, having been at one time treated for incipient insanity, who upon the night of his marriage to a young woman of delicate frame, whose father died of consumption, admitted, I should have said boasted, of having had connection eleven times (!) with his wife, the result being that four or five years afterwards he buried his wife, the death certificate being consumption.

I was consulted the other day by a young woman, married seven months, for tonsillitis. In the course of the examination I remarked that she was not looking as well as she used to before her marriage. She then went on to say, that for about four months she had been feeling out of sorts, that she began to lose flesh in two or three months after she was married, that she began to feel tired all the time, with her back hurting her, with that peculiar, heavy, dragging pain, and then that she began to have the "whites" so bad that she had to wear a napkin all the time to prevent the family from "tracking her over the house." She admitted, upon close questioning, that her husband was a man of very strong sexual passions, that he wanted to have connection every night—one, two, three or more times—whether she was "unwell" or not, that it was nearly four months before she "enjoyed it." It was plain to my mind that if she ever had any love for this man whom she called husband, it was being dispelled, and a revolting disgust taking its place, and the upshot would be a separation, and finally a bill of divorce, people would say, likely, on account of incompatibility of mind—I should rather say, because a man with the fierceness of Jupiter had transmogrified himself into a bull.

In regard to women experiencing the "orgasm" or not, I have this to the point: A Mr. ———, American, aged sixty-

one years, married twice, the first wife passionate, having two children. The second wife he married when he was thirty-five years of age, she being at the time thirty years old. The menses returned to her every time with perfect regularity until she was fifty years old, when they stopped for awhile, and then returned but once. She has borne five children, the first twenty months after marriage, the youngest is now fourteen years old. This woman never experienced pleasure for twenty years after her marriage, up to the menopause when, with the change of life, a change also occurred in regard to her sexual feelings. She now has decided sexual desire and pleasure. Her husband says, that "she is almost crazy about it, and will break out and cry over her passion now, the same as she used to over the want of it." And as a coincidence in the same family, the second son's wife reports that she too has never experienced the orgasm, though she has been married a year and has borne one child.

In the October number of the COURIER a discussion is reported on the Endermic use of Quinine. I will say that I have been using the endermic method for the administration of quinine and cinchonidia for several years, and I do most emphatically say with entire satisfaction to myself and the delight of the patients, especially to the parents of the little children whom I was called upon to treat. I firmly believe, the experiments of the Italian physician to the contrary proving nothing to my mind, after using the method successfully in breaking up intermittent and remittent fevers, as well as to combat the temperature in broncho-pneumonia and other diseases in which there is a temperature which I wish to reduce. My mode of administering quinine and cinchonidia is to make as many powders as I think necessary for a given case, putting as much of the salt as I want for a dose in each powder, and then instruct the mother to take, say from a half to a full teaspoonful of pure lard and thoroughly mix the two, and then rub into the armpits and groins a powder every two or three hours as the necessity of the case requires. I leave my patients and go about my business with as confident feelings as to the result of this medication as I do with any other means of prescribing.

J. J. CONNOR, M. D.

PALMER, ILL., Oct. 18, 1883.

SELECTIONS.

ANOMALOUS SEBACEOUS GLAND IN IMMEDIATE PROXIMITY TO THE AURICLE.

By CHARLES A. TODD, M. D., ST. LOUIS, MO., *Professor of the Ear and Throat, Missouri Medical College.*

Last year a patient came into my hands suffering from follicular abscesses in both auditory canals. He was a well formed man and employed in the St. Louis police force, holding a responsible position. After several visits he called my attention to a peculiarity which is the subject of this paper: Immediately in front of each auricle, and on a level with the beginning of the helix, was a small oval depression in the skin not noticeable except on special examination. This was the mouth of a subcutaneous canal, measuring in length on the right side 9 millimeters; on the left, 12 millimeters; the opening itself just admitting the point of the common silver probe. The direction of the canals was downwards in a straight course, the probe could be easily felt at all points.

The patient fancied that these canals had something to do with the abscesses that were giving him so much trouble, since they secreted a yellowish matter that at times required to be expressed to obviate discomfort. During his youth this secretion was abundant, requiring daily expression, else the canals would become distended and painful. He had two brothers and three sisters. The former and one of the latter had the same peculiarity, but he only suffered inconvenience; of his parents and grand parents and other relatives he could give no history.

Of his eight children, a girl aged 11 years has a follicle on the right side, it is 3 millimeters in length; another girl of 7 years presents it on both sides, length, 6 millimeters; a boy 8 years old, both sides and 6 millimeters in length.

Canals about the ears are found that are considered to be

relics of embryonic conditions, but these, according to description, are very different from the ones in question, which unmistakably are simple sebaceous follicles. The secretion under the microscope exhibits fat granules, free or still intracellular mingled with epidermis scales.

In the elephant similar crypts are found, though not opening so near the auricle, otherwise occupying a corresponding region. In two African elephants that I have dissected, the crypts were subcutaneous and appeared to be of the nature of sebaceous follicles. Among keepers of these animals it is fancied that these crypts are connected directly with the eyes, and some are careful to keep them free from collections of secretion by squeezing out their contents, as there seems to be an accumulation. This notion, of course, is baseless, as there is no such connection, the canals being distant from the eyes and quite short.—*Trans. Am. Otolog. Soc.*, 1883.

[Since this paper was written two other cases of the anomalous follicle have appeared at the Ear and Throat Clinic.]

NOTES AND ITEMS.

PASTEUR'S PRECAUTIONS AGAINST CHOLERA.—The *Revue de Hygiène* for August, 1883, gives the following instructions, given by M. Pasteur to the members of the commission sent by the French government to study the cholera in Egypt.

1. The drinking water of the locality where the mission settles to undertake researches should not be used without having been first boiled, and shaken, when cold, for two or three minutes in a phial or bottle, half filled and stoppered. The water of the locality may be used, if it be drawn at the source itself in vessels heated for some moments in air at a temperature of 150° Cent. (302° F.), or preferably to a higher temperature. Natural mineral waters will be beneficial.

2. If wine is warmed in bottles to 55° or 60° Cent. (131° to 140° F.) it may be drunk from glasses similarly warmed.

3. Only food which has been thoroughly cooked, or raw fruit well washed in water that has been boiled and has been

kept in the same vessels in which it was boiled, or poured into other heated vessels.

4. Bread should be cut in thin slices, and for twenty minutes at the utmost after being cut in slices should be exposed to a heat of 150° Cent.

5. Every vessel employed in preparing food should be heated to 150° Cent. or more.

6. Underclothing and bedding should be plunged into boiling water, and then dried.

7. Water for washing should be brought to the boiling point, and, after cooling, one five-hundredth part of thymic acid (a litre, one and three-quarter pints of alcoholized water to two grammes of acid) should be added, or one fiftieth (one litre of water to twenty grammes) of carbolic acid.

8. Carbolic acid dissolved in water which has been boiled should be used several times daily for washing the face and hands.

9. Only when one is obliged to handle the bodies of cholera patients, or sheets or body-linen soiled with their dejections, would it be necessary to wear over the mouth and nostrils a little mask, formed of two pieces of fine metallic cloth, containing wadding of the thickness of one centimeter, or more, between them. This mask should be heated to 150° Cent. on each fresh occasion of infection.

PRAGUE TREATMENT OF ECZEMA.—Prof. Pick has introduced in the hospital at Prague a treatment of eczema which is much more satisfactory than the tar treatment followed in Vienna. Immediately on the commencement of treatment the diseased parts are wrapped with linen bandages smeared with unguentum saponis containing five or ten per cent. of salicylic acid. This is applied in any stage of the disease and left *in situ* for a week. The bandages are then covered with what is known as tricot, which is manufactured in various sizes and at small expense especially for Prof. Pick in England. Thus dressed, the patient is able to go about his work with no inconvenience to himself and no injury to his clothes. After a week's time he appears at the hospital, the bandage is removed and the diseased surface is examined. If found necessary from still remaining inflammation and induration, a fresh bandage is applied

and left on for another week. Then gelatine is applied as follows: A portion of a mass made by dissolving fifty grammes of the purest gelatine in one hundred grammes of distilled water, and which has been allowed to cool previously, is melted by putting it into a cup and setting the cup into hot water. To this is added the required amount of salicylic acid, usually five per cent. When sufficiently cool, this mixture is painted upon the diseased parts with a painter's brush. The layer of gelatine is made about as thick as a sheet of writing paper, and after it has dried, this is gently covered with a minimum quantity of glycerine, spread on with the hand. This use of glycerine has been found necessary to render the gelatine layer pliable and to prevent its contracting, which it would do otherwise with considerable force, sufficient to irritate the skin. It has not been found practicable to mix the glycerine with the gelatine. With such an application the patient seldom feels the slightest itching; the diseased parts are seen through the transparent layer, and whenever desired an ordinary bath removes all traces of the application, and the patient himself can renew the applications. There is no reason why the medicated gelatine should not be immediately applied in any cases of eczema at any stage; but experience has shown that salicylic acid first applied in the moist stage of acute eczema in the form of salicylated soap ointment for a period long enough to reduce the inflammation, renders the use of medicated gelatine more prompt in its results.—*N. Y. Med. Rec.*, July 28.

MEDICAL COLLEGE DRUMMING.—The following letter was received by a young man now attending one of our medical schools. It shows the methods used by some institutions to underbid and win away students from other schools. This letter was apparently one of a number produced from the original manuscript, by the hectograph or other similar process:

My Dear Sir.—A friend writes me that you purpose attending medical lectures. I write to present the claims of ————, the medical center of the South and West, the healthiest large city in America—beyond the reach of the yellow fever, etc. Good board, costing elsewhere $20 to $25, can be had here for $12 to $15 per month. Owing to our exposition railroad fare is only one-half rate. No school has better facilities

for medical teaching than the ——— Medical College. As I am allowed a certain number of beneficiaries from your state, I will take you as one and charge you only $50 instead of $80. With this reduction, cheapness of board, and reduced railroad fare, you can attend one of the best schools for even less money than an inferior one. Let me hear from you. Send names of other students, and oblige yours truly.

BOARD OF HEALTH, TAKE NOTICE.—[ED.

IT seems strange that a city built in such an eligible location as New York, with rivers on either side and Long Island Sound just above, and the Atlantic below, with the Pallisades and highlands of New Jersey within sight, should be one of the unhealthiest cities in the civilized world. The death-rate here in 1882, however, shows that this is the case. It averaged for the year 29.64 to a thousand. The death-rate of London, with three times the population of New York and not so favorably located, was only 21.29. Paris has a million more people than New York, but its death-rate is lower; last year it was 26.27 in a thousand. Berlin, which is smaller than New York, loses 25.94 in a thousand. Even Vienna, which is one of the unhealthiest cities in Europe, lost only 29.16 out of a thousand in 1882. Some of our Southern towns, which are annually swept by epidemics, have a lower death-rate than this city, which it certainly seems should be a place to live in rather than to die in. The subject deserves a more serious and earnest attention of the authorities than it has ever received.—*N. Y. Ev.*

CURIOUS CUSTOMS IN PARTURITION.—Dr. Roussenard communicates to the *Revue Scientifique* some very curious details in regard to parturition among the Galibi women, which he has observed among the Indians who dwell in French and Dutch Guiana on the banks of the Maroni.

When the woman feels the first pains she leaves her hut, betakes herself to the nearest creek, squats down upon the ground, and without uttering a groan, awaits the time of her delivery. The pains appear to be very strong, but their duration rarely exceeds two hours. As soon as the infant has uttered its first cry, the mother, who in this trying moment has no one to assist her, plunges into the icy water of the creek,

bathes freely, bathes her infant and makes her way back to her primitive abode.

Meanwhile the other mothers gather tumultuously around the dwelling, whence come terrible vociferations. The native physician beats with his arm upon a tambour to drive away the evil spirits. No one seems to pay any attention to the woman who has been delivered, who with difficulty forces an entrance into the lowly hut, lays her infant in its cotton hammock, and sets herself to the task of taking care of a personage who is shrieking and struggling in another hammock. This personage is none other than her husband. She prepares for him a soothing drink called matité, replacing probably "the toast in wine to the woman delivered," which our Lucine countrymen prescribe. The red-skin drinks his draught, utters new groans, and falls asleep in the midst of a thick smoke, produced by the the combustion of fragrant herbs spread in profusion by the woman upon the floor of the hut. Then she devotes herself as previously to the cares of her household, and fulfills without any failure the rude drudgery imposed upon her by her condition.

During ten consecutive days the husband has himself pampered in this way, without for a moment quitting his couch, bemoans himself, responds in broken accents to the condolences of visitors, and affects all the airs of a foolish woman. At the end of ten days he quits his bed and all is well.—*L' Union Méd., June 9, '83.*

OBITUARY.—DR. R. W. OLIPHANT died October 9th, 1883, in his fifty-ninth year. He was a native of Massachusetts. He was a graduate of Amherst College, and of the medical department of Harvard University, and was one of four from the large graduating class selected as house physicians to the Massachusetts General Hospital, where he had the best possible opportunities for clinical instruction and gaining practical experience. On leaving the hospital he came to St. Louis in the fall of 1849. It happened that just after his arrival here a tragedy occurred at Barnum's Hotel, where he was stopping. Two young men, Messrs. Barnum and Jones, were fatally shot by a young French Count by the name of Montesque, who is supposed to have been insane. Young Barnum fell just at

the door of Dr. Oliphant's room and was carried in there, and was skillfully and sedulously attended by the doctor during the few days before his death. The notoriety of this circumstance served to make him known, and it was not long before he acquired a good general practice, which increased and became a very profitable one.

He held in a remarkable degree the affectionate regard as well as the confidence of his patients. He was a man of cultivated tastes and liberal culture. He read much, not only of professional but general literature. He was a scholar, a true gentleman, a devout Christian. He suffered from a stroke of paralysis two and a half years ago, since which time his health has been failing, and for the last five months of his life he suffered from Bright's disease of the kidneys with many distressing symptoms. He was attended during his last illness by Dr. Wm. McPheeters, to whom we are indebted for the facts we have given above.

QUERIES AND COMMENTS.

MR. EDITOR:—In using the hot water douche as a part of the treatment of metritis or parametritis, how long should the application be continued, and how frequently repeated? J. C.

In a paper read before the British Medical Association, Dr. Arthur W. Edis discussed the treatment of chronic metritis associated with retroflexion, and as a part of the treatment recommended the use of the hot vaginal douche for ten minutes twice a day. In the discussion following it, Dr. Wallace, of Liverpool, stated that in order to secure satisfactory results it was necessary to use the duoche for twenty to thirty minutes, three times a day. Dr. Edis in reply stated that in practice he found that patients generally were not able to continue its application for the length of time advised by Dr. Wallace.

In chronic cases the use of the hot douche for ten or fifteen minutes twice or three times a day will probably secure all the advantage that can be derived from this agent. In acute cases it will not infrequently be found of advantage to administer the douche more frequently and for fifteen or twenty minutes. In either case it should be so used as not to fatigue or distress the patient. On the contrary the immediate effect should be soothing and comfortable.—[ED.

ST. LOUIS
COURIER OF MEDICINE.

VOL. X. DECEMBER, 1883. NO. 6.

ORIGINAL ARTICLES.

PUERPERAL FEVER.

BY P. V. SCHENCK, M. D., *Clinical Lecturer on Gynecology to Missouri Medical College.*

[*Read before the St. Louis Medico-Chirurgical Society, Oct. 30, 1883.*]

THERE are certain states or conditions which stand out so prominently that they head the chapter, and each part must be placed in conformity therewith. They form the surname, and each disease occurring therein must be brought into the family. Thus, after syphilis all maladies are called syphilitic; after scrofulosis, all ills are strumous; after tuberculosis, all diseases are tubercular. This general law affects not only our nomenclature, but it also guides our treatment.

The puerperal state will impress its stamp upon any kind of disease, no matter whence its origin; and will render the system peculiarly liable to the inroads of zymotic diseases. During this period, while the refuse material, the detritus, is being carried off, while the old timbers are being removed, while there is a low nervous and vascular tension, there is a

more tedious character impressed upon the diseases which occur. But, notwithstanding this, nothing can be more erroneous than to term every fever immediately after parturition puerperal fever. This transformation theory, that pregnancy has the marvelous power of transforming all febrile diseases with which it may be associated, not into so many other conditions, but all into one and the same disease, the underlying malady, of which the fever is but an indication, requires a careful research, whatever be the prominent outstanding condition. This fact, this habit, if I may use the expression, has tended much to confusion in the diagnosis and treatment of fevers, as found in a puerpera. Thus diseases, having but one common tie, are by each writer placed under different etiology, described under different symptoms, and met, as they report, successfully by different remedies, building an obstetrical Babel, causing a confusion in the teachings and writings that would worry the historian of obstetrics, Siebold himself.

Puerperal fever, as now described, has in its given etiology causes directly opposite. To fill the present view and definition, it would have to be almost protean in character, shifting in all its aspects. From one we learn that it is a form of purulent infection; from another, that it is due to the entrance into the blood of poisonous products. One states the cause is heterogenetic, or auto-genetic; another that it is hetero-infectious, or auto-infectious. One sees a local origin, another believes the cause general; one says there is no essential fever, another that it is typhus; one considers that the uterus plays but a small part in its production, while another thinks its occurrence impossible, after a complete contraction of that organ. It is agreed that a soft uterus, just emptied of its contents, with its dilated veins and lymph vessels, its close proximity to the peritoneum, is a source of especial danger, and inflammation may extend through the Fallopian tubes, or pyemia and septicemia through the blood-vessels and lymphatics.

The German school recognizes the local affection as the point of origin, and places it in the genital organs. Some authorities have found a puerperal ulcer in the vulva; others find an endometritis, or the morbid processes underlying an endometritis; and thus we run the scale.

Hervieux sees a puerperal miasm, Velpeau a local inflammation; Scanzoni thinks the seeds of the disease are planted before labor; Spiegelberg finds an inflammatory process in the neighborhood of the uterus; Tourneville a metritis, Lee a parametritis, Pinel a peritonitis, Behen a lymphangitis, Dance a phlebitis, and Janeway a thrombosis.

On the one hand we have described, just as in menstrual peritonitis—for the tendency to peritoneal disease is greater at that period—an extension of the inflammation from the endometrium, along the Fallopian tube; while, on the other hand, we are told there is a peritonitis, but it is of a different kind from that in the non-puerperal condition; again, this peritonitis is called malignant, and that this is the entire expression of the disease. By setting aside individual authorities, who state that if puerperal peritonitis is included in the description of puerperal fever, it is certain that newly-delivered women may succumb to serious fever that is often fatal, but leaves no trace in the womb, statistics show us that in almost one-half of the cases of puerperal fever there is no peritoneal inflammation; and from this the conclusion is drawn that metritis and peritonitis are accidents. Bartsch, in his report of the morbid appearance of one hundred and nine cases of puerperal fever in the midwifery institution at Vienna, says the cases of puerperal fever occurred seldom under the form of puerperal peritonitis. Churchill says the effect of remedies, the symptoms and course of puerperal fever, is so different from inflammation of the womb or peritoneum in child-bed, that he does not see how a doubt can remain upon the mind of a professional man.

Puerperal fever is not exclusively a local disease. Watson puts it that it is not simply an inflammation of the pel-

vic or abdominal viscera; Locock and Bennett have both reported many cases where there were no post-mortem appearances of inflammatory action or effusion anywhere in the abdomen, or in the uterus, its appendages or vessels; and my own experience has furnished many more. Göden says, from his observations and dissections, it is not alone peritonitis, but the disease is seated in the pleura, the pericardium, pia mater and arachnoid; and this view meets the approval of Rokitansky, who also showed changes in the blood.

Others, again, say it is not the serous membranes; it is the nervous system. Gooch considered it a nervous affection; Payne contended the abdominal nerves were enlarged; want and anxiety was the belief of Ferguson; mental depression that of Park; emotion, states Barnes, is in many cases, the most conspicuous genetic cause; while Jacobi thinks that moral emotions have a power in a goodly number of cases, that the inability of the uterus to contract is essentially a nervous phenomenon, and doubtless depends upon paralysis of the nervous center which presides over the contraction of the womb. This center has been demonstrated to be the medulla, which stands in very close relationship with the nerve-centers which are affected by depressing moral emotions. Atthill believes that a relaxed condition of the uterus, caused in a great measure by the great mental distress, is one of the causes of the frequent occurrence of the disease in unmarried women. Bernardy thinks there is a tendency in a patient to the recurrence of puerperal fever, and asks, can the nervous system have a hand in it? Cassels reports a case of nervous puerperal fever caused by a vivid dream, and Colvin had a case closely resembling cerebro-spinal meningitis. There is no doubt that the mind is so affected often that it is difficult to say but that you have puerperal mania to deal with.

The circulatory system is a prominent field as an attributed cause. Parish puts all puerperal diseases together, and believes one may cause the other. Blood-poisoning is

the determining condition. Ferguson over forty years ago taught that the condition consisted of a vitiated state of the fluids; Scanzoni states that it is due to an excess of fibrin. Blood-poisons may be divided into specific, as in small pox, or non-specific, as in septicemia. Modern pathology teaches that the blood may be poisoned in various ways—the breaking down of a portion of the placenta, membranes, blood-clots, a contusion or laceration of the cervix, or vagina—such a death of tissue as Virchow has called necrobiosis.

Puerperal fever for many years has been known by the plural title of pyemia, septicemia and phlebitis. Bedley, in his lectures on septicemia, puts down pyemia, septicemia and puerperal peritonitis as all varieties of one disease, which may be termed septicemia.

There is no doubt that there is a disposition to the formation of pus in lately delivered women, but that these diseases are all associated with the development of organic germs is a mooted question; whether germs produce any change whatever upon living tissue; whether in blood-poisoning the changes have any analogy to those seen in putrefying dead infusion; whether bacteria are the result of or causes of putrefactive processes; whether they act as the carriers of poison or as the poison itself. Pasteur, in May, 1880, reported that he found in the lochial discharges microscopic organisms. He reasoned thus: From the wound in the uterus after delivery there is a purulent discharge, which affords a virus for germs; these subsequently penetrate into the organism by the lymphatics. Billroth defines septicemia as a constitutional, generally acute disease, which is due to the absorption of various putrid substances into the blood; and it is thought that these act as ferments in the blood, and spoil it so that it cannot fulfill its physiological function. Pyemia is a disease due to purulent infection; in other words, to the presence in the blood of pus or certain of its constituents. Hutchinson's view is, that pyemia is due to inflammation of the patient's own veins,

and to suppuration in their interior. Septicemia he defines as blood-poisoning induced by inflammation of the patient's own tissues, other than the veins, whether that inflammation arose spontaneously or was caused by an irritant from without. Koch includes all cases of general traumatic infection in which no metastatic deposits occur under septicemia, and those in which such deposits occur as pyemia. He asserts that bacteria are hardly ever found in the blood in septicemia, whilst they are commonly found in pyemia. Virchow, from accurate experiments, has proven that the puriform fluid found in pyemic deposits is not pus, but disintegrated clot; and Bristowe puts thrombosis as the cause of the obstructions which tend to secondary deposits. Duncan contends that septicemia is produced by organisms which, when conveyed to the blood, multiply indefinitely in it, while organisms arising from putrefaction do not survive, far less grow in the blood. Septicemia, pyemia, and phlebitis are distinct pathological conditions, although all may be coincident in the same patient. The septic origin of puerperal fever—and there is much in fashion—is the fashion of the day. Bacteria is the commander, and sepsin is the adjutant — a septicemia practically identical with that which is familiar to surgeons under the name of pyemia or septicemia. In 1872 the New York health reports removed from the zymotic class puerperal fevers and incorporated them with developmental, because it was impossible to distinguish between so-called puerperal fever, pyemia, septicemia, metritis and puerperal metro-peritonitis. In the classification at Guy's Hospital all these diseases are put under the head of puerperal septicemia. Thus they speak of puerperal peritonitis and other forms of puerperal septicemia. In this view surgeons are all united, reasoning from what they know to what they do not know.

But obstetricians are not so united. They all believe there is a puerperal septicemia; that septic matter may be conveyed to and deposited in the utero-vaginal tract; that

it may act perhaps by the poisoning of the blood by the growth of micrococci, by organisms which multiply indefinitely. They also believe that there is a self-inoculation by absorption of putrid matter; but they do not believe these cover what they consider the disease more properly called true puerperal fever. Lusk and Parry see a diphtheritic cause, and Martin, of Berlin, regards the diphtheritic process in the genital organs of lying-in women as the only essential element. Playfair cites the case of a woman suffering from this disease, whose husband at the time was ill with diphtheria, and inquires, "Is identity of cause followed by identity of result?" The profession is united in reference to the intimacy of connection which exists between phlegmonous erysipelas and puerperal disease. This fact was well known and believed in by Hippocrates, and it has become a fearful positive teaching of medical expeperience. The similarity of the two diseases is marked. Putrid infections will not produce it; the disease may be transported; it will spread from bed to bed; like yellow fever, it has gone up one side of a ward and down the other; it is spread by contagion. Crowding of patients will not produce it; it is unassociated with pyemia. Like puerperal fever, seasonal influences affect it. From New York statistics we learn that for one hundred and forty-four fatal cases, fifty-four will occur during the winter quarter, fifty during spring, eighteen during summer, and twenty-two during autumn.

Duncan has denied the epidemic character, but statistics and experience have proven otherwise. The statement of Volkmann bears strongly on this point. There is no doubt that its cause is diffused through the air, and that it is often epidemic. During an epidemic of puerperal fever in Pollenzi, Lapponi has lately reported the case of a husband having connection with his wife while she was ill with the disease. The man as a result had erysipelas of the skin of his penis, lymphangitis and lymphadenitis; the skin became gangrenous, and on the sixth day the patient died.

Puerperal erysipelas, according to Hervieux, Doublet and Cornil finds its starting-point in injuries, rents and bruises of the utero-vaginal tract. Atthill's and other statistics are of interest in this connection.

Facial erysipelas is not very common in child-bed, and in lying-in women, otherwise healthy, it is without serious import. During my service at the hospital last year I had several cases of it in my lying-in department—one case especially in which it was of a severe type, occurring on the morning following delivery. With her there were no signs of puerperal erysipelas; neither was there any one else affected.

Is puerperal fever infectious and contagious, as advocated by Dubois, or is it non-contagious, as advocated by Schroeder? The majority believe in its inoculable, infectious and contagious character. To say that puerperal fever is not contagious is to refuse to believe in one of the best-attested facts in medicine. Gordon, in 1789, was the first to teach the theory of specific contagion in puerperal fever. Gooch, Armstrong, Ramsbotham, Robertson, Smith, Barnes, Routh and Semelweis all prove its contagious character. Contagion is a mode by which diseases are transmitted from one person to another by mediate or immediate contact. Contagium is a specific excitant of disease. The poison has no special stage of development in its passage from the infecting organism to the one to be affected. Whether it consists of ferments, the origin of which is organic functions; whether every ferment is a germ, whether of living beings or low organisms, is not for present consideration. First, it is not in point, and second, the investigations into the organisms which lie at the root of all infectious diseases have scarcely been begun, and there is but little accurate knowledge of many of them.

Puerperal fever is a specific, infectious, contagious disease, which meets in the puerperal woman a special susceptibility—a real diathesis.

Is puerperal fever ever epidemic? Duncan denies its

epidemical character, but thinks, with Buchan and Mitchell, that it has seasonal variations. In my experience, all the cases at the Female Hospital occurred during the months of February and March. Our mortality tables show that in this city these are the months most fatal in this disease. The statistics of New York City show, too, in every one hundred cases of puerperal fever forty will die in the winter, thirty in the spring, twelve in summer, and eighteen during autumn. Old-world experience told the ancient surgeon, all operations possible to postpone to summer and autumn. We know that particular winds affect diseases for good or ill. In Sierra Leone intermittent and remittent fevers cease, and small-pox will not spread, even by inoculation, when the Harmattan wind blows. There is no doubt that there are certain atmospheric influences, what Sydenham called constitutions of the air, which during the prevalence of yellow fever we speak of as a wave—certain epidemical controlling powers, which may conduce to or prevent the spread of even contagious diseases. Watson asks the pertinent question, how happens it that these inflammations (speaking of metritis, etc.), if they be the primary and sole cause of the disease, are so rife under a particular epidemic constitution of the atmosphere, requiring no other predisposition than merely the act of parturition, while in the absence of such epidemic influences the uterus may be tried to its utmost by the effects of child-birth? It may be ruptured, laid open by Cesarean section; the hand be inserted into it in the act of turning; it may be inverted and subjected to the manipulations necessary for its replacement, and yet no inflammation of the organ shall result; or if it does it will not be accompanied by phenomena in the least resembling those characteristic of true puerperal fever; but there is some insensible principle, some power producing epidemics, which hangs over the lying-in woman, hangs over the puerperal woman, like "the sword of Damocles, as fatal as the sword of the angel above the sleeping hosts of the Assyrians." Hensch and Ferguson have

shown the epidemic character of puerperal fever. In 1821 it was epidemic in France, in Holland, in Scotland and in London. More than two hundred epidemics of this disease have been described since 1840. Putzel reports that during its prevalence inferior animals die of larger numbers of diseases connected with parturition. Byford has shown that epidemic influence affects it, and quotes that during the prevalence of the black-tongue in Indiana, in 1839, in the first part of the epidemic all puerperal cases died. Puerperal fever occurs in an epidemic, infectious form, which spreads by the same means as ordinary epidemics. Passing by the atmospheric influence as advocated by Hervieux of Paris, and Spaeth of Vienna, the nosocomial malaria of Giraldi, all these have their influence, but they will not produce a special disease, though they may furnish a proper soil. Cleanliness stands in the creed of our profession next in point to where the theologian places godliness in his.

When we look over the immense field from which the etiology of puerperal fever is drawn; when we view the opposing and varied opinions held; when we consider how differently symptoms of disease are valued; when we appreciate that pain and each of its varieties does not yet bear to the physician a distinct message as to the disease of which it is a symptom, can we wonder that such a scope is covered by authorities in defining puerperal fever, that Edis puts it as a fatal puerperal disease of doubtful character and origin? Farre preferred the name of post-partum; some call it a form of metro-peritonitis; Schroeder says it covers all diseases of puerperal women caused by the absorption of septic matters; Livergood defines it as a disease characterized by its insidious mode of attack, the rapidity with which it proves fatal, and the difficulty experienced in compelling it to succumb to treatment; Simpson's definition extends from mastitis to all forms of fevers; Kirkland says every fever during the time of lying-in may properly be called a puerperal fever. The Committee of the London College of physicians was compelled to add a

foot-note to their definition, requesting all, in reporting cases of puerperal fever, to specify the more important local lesions, such as peritonitis, effusions into serous and synovial cavities, phlebitis, and diffuse suppuration. Sireday, exhausted in his effort, contends that there is no such thing as puerperal fever—a statement which Duncan says may now pass unchallenged. From such facts as these, we can explain how some men of large experience report that they have never seen a case of puerperal fever, while others are having a large number each year.

Let one of these many conditions be taken; let it no longer be a multiform disease, though it remains a monster in the lying-in room; let it no longer be hydra-headed; and, if we must, then use the term originated by Strother in 1716, and call it puerperal fever. If we have cellulitis from laceration of the cervix, call it cellulitis; if we have, as shown by Villemin in 1847, a metritis from the same cause, call it metritis, which, uncomplicated, is not a dangerous disease; if there be inflammation of the parametric tissue, as pointed out by Virchow, if there be inflammation of the pelvic portion of the peritoneum, call it perimetritis; if we have a connective tissue phlegmon not extending to the peritoneum, due to an infection of septic material, call it para-metritis; if there be an inflammation around the cervix, with an intermission in the febrile conditions, call it para-cervicitis, as suggested by Seidenkoff; if you have malarial influence at work, call it malarial fever; if pyemia, with its embolism, call it pyemia; if there is putrid intoxication, call it sapremia; if you have peritonitis, malignant in its type, call it malignant peritonitis, accepting Sanderson's view, that successive inoculation occurs with increased virulency; if with labored respiration, with a yellowish tint of skin, septic in its origin, call it septic peritonitis. Classify, if you desire, the action of septic germs in the hyper-fibrinated blood of a puerperal woman, under the head of metria, as suggested by Thorburn. But there is an outside disease—call it puerperal

fever, if you will. Unlike septicemia, it is contagious or infectious; unlike septicemia, it has often prodromic symptoms. It will run through the lying-in wards as measles attacks a school, or scarlet fever seizes upon an orphan asylum. It enters, you cannot say by what door, and it goes out much in the same manner.

In the first few years of my obstetrical practice I had cases which I supposed to be puerperal fever; but I never knew what it was until a puerperal fever wave appeared. Take ten or twelve women in the same ward. One has a perfectly normal and easy labor; she is attacked, and speedily dies; whilst a woman delivered only a few days before, lying near, in whom a wound was really inflicted by the forcible detachment of an adherent placenta, recovers without a bad symptom. In a few days after the death, each case delivered is attacked with a severe disease. Now what is the difference? The latter patient escaped septic trouble—an accidental cause—while the former was attacked by a zymotic, infectious, contagious disease. In most of the cases of true puerperal fever the disease commences with a chill; the womb is in a healthy condition; unlike septicemia, the temperature is not as high in early stages as the later. The disease appears as in the outbreak at Queen Charlotte's Hospital, where there was no overcrowding, no defective sanitation; yet seven women died out of twelve deliveries. Hospitalism did not affect them, for ten came in within twenty-four hours preceding delivery.

In 1875, when the disease prevailed at the lying-in institution under my charge, to such an extent, there was no local cause. Many of the cases had been there but a few days before delivery. There was nothing unusual about the delivery, no want of contraction of the womb; and yet every case, within twenty-four hours after parturition, was attacked, and the disease followed those transferred to another building, with a change made in their clothing. No nurses nor professional attendants were with them there that were with them previously. In this disease there is

often pelvic pain, but an increase of temperature, with rapid pulse and pelvic pain, are not all that is necessary to constitute puerperal fever. There is a peculiar, dirty, muddy, rather a cyanotic, complexion, great weakness, intense thirst, constant retching, cold perspiration, a peculiar odor of the skin. There is often little, if any, abdominal pain; little, if any, tenderness. Unlike malignant puerperal metritis, the lochia are not suppressed. The mind is clear, though wandering sometimes, with much irritability; often there is a hurried respiration; the nervous system has been seized upon; there is great and marked wakefulness, and a most marked tolerance to the use of opium.

Puerperal fever is a specific disease, like typhus; it is a rare disease; it is as defined in its latency, its duration and its pathology as typhoid fever. The poison of it is as well known as that of the exanthemata; it is infectious and contagious. Unlike septicemia, it tracks the country doctor in his rounds; it is often epidemic, and is not a pyemia nor a septicemia. In its treatment, intra-uterine injections are seldom of any special benefit, while in the other diseases, especially sapremia, they are of great service.

In conclusion, in the study of the etiology of puerperal fever, we should not leave the old landmarks; neither should we follow any modern ignes fatui. We should not erect gorgeous air-castles in place of the solid structure which our fathers have laboriously, though with many failures, founded on the rock. Let us found our theories by collection of facts, by tedious resort to experiment, by observation and by the application of demonstration. Let us not trust to imagination, though it is more alluring than the employment of reason. To those who oppose the view I have given of the etiology of puerperal fever, I cannot do more than recall to their memory the quotation so aptly made by Barker, namely: "I beseech you, by the mercies of God, conceive it possible that you may be mistaken."

ON THE INTERDEPENDENCE OF UTERINE AND RECTAL DISORDERS.

By W. Hutson Ford, M. D.

Read before the St. Louis Obstetrical and Gynecological Society, Sept. 20, '83.]

[Continued from November Courier.]

Rectal and anal trouble is often traceable to pregnancy and labor. "The active developmental nisus," says Barnes, "bringing to the pelvic vessels a large quantity of blood, leads to distension, to venectasis, which does not always subside after labor. The vascular plexuses encircling the anus and lower part of the rectum become dilated, like the plexuses around the vaginal outlet. When these parts are compressed for several hours during labor, and inordinately stretched in the final act of expulsion with the tissues in which they are imbedded, perhaps even lacerated, the vessels themselves receive serious injury, from which they may never recover. Thus it is that pregnancy and labor form the frequent starting point of hemorrhoids in women." This distension during labor may cause fissures by lacerating the edge of the anus, or the rectal mucous membrane lining the sphincter, while the parts are turgid and prolapsed, just as the urethra may be bruised and lacerated throughout its entire length by the extreme distension. Here we find the origin of varicosities of the urethral mucous membrane, fissures of the neck of the bladder, lacerations of the urinary meatus, urethral caruncles, and prolapse of the urethral mucous membrane.

It is not the object of this paper to notice affections of the colon and rectum dependent upon nervous lesions, the pressure of tumors or abcesses, malignant disease, or inflammation of contiguous organs. In such cases the symptoms are not primarily uterine, and are sufficiently marked to force themselves at an early period upon the attention.

In many of the class of cases, however, under consideration at present, the symptoms determinable are only exaggerations of those usually indicative of ovarian and uterine affections, and this is so even when the uterine disorder is consecutive upon the rectal. All the symptoms are exaggerated at the onset of the menstrual flow. Unless leading questions are asked, the patient seldom refers to the rectum or its functions, except to speak, perhaps, of habitual constipation. This has become so constant a feature of her existence that she hardly thinks it necessary to mention the pain experienced during and after her motions, and is not apt to know anything of their physical appearance, unless there is some bleeding from the anus. Direct questioning is necessary respecting things which the patient firmly believes to be altogether secondary in importance to her uterine troubles, and special instruction as to an inspection of her own stools must be imparted before the primary diagnostic points can be obtained. I may as well remark that these cases are peculiarly prone to deceive the practitioner himself, even skillful men needing all their acumen for a recognition of the true significance of symptoms *seemingly uterine.*

When upon exact questioning and actual inspection of the feces, the passage of blood, mucus or pus is determined, when constipation exists in conjunction with pain during and especially after defecation, when defecation has to be repeated at short intervals, with rectal fulness and dull pain, an examination should be made. The pain caused by the pressure of the speculum through the vaginal wall upon the rectum, often gives the first hint of rectal disorder. This hint should be followed up by palpation of the rectum from the vagina, and the opportunity should be improved to evert as much as possible of the lower part of the rectum through the anus upon the tip of the forefinger introduced per vaginam. The parts are usually too sore and the sphincterismus too pronounced for this maneuver to accomplish much. We may however succeed, with but

little trouble or alarm to the patient, in bringing into view a marginal or even intra-sphinteric fissure, a prolapsed fold of mucous membrane, pile, or polypoid growth, grasped habitually by the sphincter. We will at least recognize a lividity and congestion of the mucous membrane which will show the necessity of more thorough examination. This can seldom be accomplished without anesthesia; it is painful, nearly always unbearably so. A rectal examination with specula cannot be made every day like a vaginal one; on the contrary, the parts require so much more force in dilatation, are so much more contractile and more sensitive, especially when diseased, that we must make our examinations as rarely as possible, and consequently must endeavor to combine thorough diagnosis with fully appropriate operative measures on the same occasion.

As a preparation for any formal examination of the rectal cavity or contemplated operation, it is imperative to empty the bowels thoroughly twenty-four or forty-eight hours previously, and on the day in question to wash out the bowels by an enema several hours before the visit. The patient should have eaten sparingly and partaken of a very light breakfast. Unless the rectum is properly emptied no thorough inspecton can be made, for the field of view and of operation is liable to be deluged with fluid feces as soon as the reflex contractility of the bowel is excited by the introduction of a speculum. Such an accident prolongs and most disagreeably complicates the sitting, masking from sight the walls of the rectum, and preventing accurate observation or operations of any sort until the parts are cleaned and the bowel ceases to pour down fresh instalments of feces.

The patient should be placed upon a table in Sims' position, before a strong light, and the appearance of the anus noted. Here we may find external piles, fissures, skin flaps, ulcerations or cutaneous eruptions. The forefinger well greased with lard should then be passed with gentleness through the anal orifice and the parts examined as it is

pushed in. A practiced touch will appreciate the degree of sphincterismus and determine the existence of ridges, tumors, ulcerative depressions, scybalous masses, sacculation, the extent to which the rectal cavity is encroached upon by the fundus or cervix of the uterus, and the sensitiveness of different points under pressure by the finger-tip. Marked sphincterismus will infallibly indicate chronic rectal irritation. If it be desired to examine more deeply with two fingers instead of one, the patient must be thoroughly anesthetized with ether. A few final inspirations of chloroform will insure quiet in parts so contractile, and whose irritation is so efficient in exciting reflex movements of the trunk and lower limbs. We may now ascertain the presence of tumors attached posteriorly to the uterus, cellulitic indurations, malignant growths, stenotic conditions of the bowel, and the existence of tumors encroaching from above upon the rectal cavity. If pressure be made upon the hypogastrium, and the fingers of the left hand be used, almost the entire posterior surface of the uterus and ovaries may be examined.

If it be thought requisite, we may now proceed to a visual examination of the rectum, and, indeed, the opportunity ought not to be lost even if nothing definite be discovered by the sense of touch, which is more liable to error than that of sight. A three-bladed dilating speculum, well greased and directed towards the sacral cavity, should be passed in with care as far as it will go, while the knees are well drawn up, and the nates held apart. The handles should then be approximated slowly, and fixed by the screw, at several different movements, until the sphincter is dilated enough to allow us to examine the bowel in all its parts to a depth equal to the full length of the blade of the instrument. When the expansion is complete enough, the instrument is handed to an assistant, whose business it is to keep it in position and to resist the powerful expulsive efforts which constantly strive to eject it. Our scrutiny will be greatly aided by the use of laryngo-

scopic mirrors, not less than an inch in diameter, on flexible copper stems, for the examination of deep ulcerations, abraded tracts and spots hidden by folds where the presence of ulcers is suspected.

When one segment of the rectum has been examined the dilator should be unscrewed enough to be turned easily around through ninety degrees, and then screwed up again, so that in turn we may leisurely observe every portion of the bowel. During the examination some sponging with cold water may be necessary if stretched ulcers or the congested mucous membrane should bleed. The trivalve speculum described is the only one to be relied upon for either examinations or operations. Ashton's cylindrical fenestrated speculum entirely fails to put the parts sufficiently on the stretch and is useless for examination above the sphincter. Even the bibalve speculum fails in the same respect, although quite useful in searching for fissures, polypi, or piles situated very low down. Sims' speculum vaginæ is sometimes employed, but does not dilate the anal opening, and hides too much of the rectal wall and mucous surface covering the sphincter. If a blunt gorget, or what is termed a gorget-speculum-ani be used with the trivalve and mirrors, or even with Sims' speculum in some cases, excellent opportunities for inspection will be afforded. For operation, however, the trivalve is indispensable. Unless we have plenty of room, steadiness, good illumination and freedom from embarrassment by the specula themselves, we cannot inspect carefully nor operate accurately ; it is precisely in this way that Sims' speculum has rendered such signal service in operative gynecology. Space, light and steadiness are very difficult to realize in rectal inspections on account of the depth of the parts, their great irritability and strong contractility and the highly developed character of the anus and its neighborhood as a point of origin for stimuli most readily responded to by reflex contractions of the intestine and abdominal muscles, and the muscles which straighten out the limbs and project the pelvis forward.

If polypi are discovered, they should be seized at their base with a Smith's clamp and cut or twisted off. The stump, if extensive, should be seared with the cautery. Internal piles are best treated in a similar fashion. This is a preferable method to the ligature, I believe, unless, as Allingham suggests, we divide the lower part of the pedicle or pile, and tie its upper part. The ligature, however, is alway painful and sometimes tedious in coming away. If the clamp be carefully relaxed and bleeding points touched anew with the tip of the cautery, there is but little danger of hemorrhage afterwards; Henry Smith says, none at all. The injection of these tumors with carbolic acid and oil or glycerine, I have always found to cause much pain, and a very considerable and most distressing local rectitis is apt to complicate the operation, if more than a single injection be made at one time.

Flaps of mucous membrane liable to be caught in the sphincter should be removed in the same way, if thickened or of any size, and if not readily reducible nor amenable to treatment by astringents. Piles strangulated within the sphincter, or developed there, must be excised. External or marginal piles, if containing a clot, should be incised and the clot turned out; if consisting merely of flaps of hypertrophied mucous membrane, the remains of absorbed previous marginal piles, they should be cut off, one or two at a sitting.

Ulcerations above the sphincter should be thoroughly cauterized with the solid nitrate of silver or with strong nitric acid, care being taken to inject a solution of bicarbonate of soda into the rectum immediately afterward. When fissures are observed, the point of a sharp-pointed curved bistoury should be made to transfix their base so as to divide the underlying muscular fibers of the sphincter, and this muscular ring itself must be stretched so as to rupture its fibers, cut across, or dealt with in both ways. Dilatation of the sphincter is no less essential where the rectum is sacculated and generally inflamed with a dispo-

sition towards venous varicosity, even if no piles nor fissures are observable. This chronic rectitis is frequently present and is difficult if not impossible to relieve, unless the rectal outlet be kept patulous for a considerable time. Dilatation should be thorough, so as to last at least three weeks, however done, and to avoid the necessity for its repetition. Simple stretching, by pulling with the thumbs forcibly, until resistance ceases and the thumbs touch the ischiatic tuberosities, often requires more strength than can be applied in this way. The method by which adequate force may be applied is to introduce a Sims' speculum well into the anus, holding its handle in the left hand, the patient being on her left side. Strong traction is now made on the speculum, while the opposite or lower side of the anus is pressed down to the corresponding ischium with the thumb, or thumb and fore-finger together, of the right hand. The sphincter can almost always be ruptured in this way. Even this will not suffice in some cases of narrow pelvis, and the degree of stretching realized will fall short of complete rupture, failing to paralyze the muscle for more than three or four days, which is by no means long enough for the attainment of the desired results. Generally speaking, simple stretching, however thoroughly done, must be regarded as not wholly reliable, at least such is my experience of it, as it fails to paralyze the muscle for a sufficiently long period of time, and has to be repeated in not a few cases, more than once. Division of both the external and internal sphincteric fibers is a severer measure. When the cut is made through the mucous membrane, it leaves a wound which is sometimes slow to heal, and is occasionally followed by partial incontinence of fluid feces due to the distortion and pocketing of the anal ring by cicatricial contraction. Occasionally a fistulous orifice opening on the verge of the anus results, the cut failing to unite in its deeper parts in consequence of the disturbing movements of the sphincter itself and levator ani.

The method which has given me the best results in cases otherwise intractable, and which insures patulousness of the anal orifice longest, is a combination of thorough stretching with the dilator with unilateral or bilateral *submucous* division of the sphincter. By this method, after the ulcerations are cauterized or fissures incised through their base, the anus is forcibly dilated by pressing upon the handles of the dilator until resistance ceases or the blades touch the ischia. A slight incision is now made through the skin on one side with the point of a sharp bistoury, just beyond the margin of the external sphincter, a blunt pointed tenotome, first rendered aseptic, is passed on the flat by the little incision, outside the sphincteric fibers and upwards behind them for about an inch and a quarter. Its edge is now turned against the muscular bundles salient under the traction of the dilator, and is made to divide them thoroughly without invading the mucous membrance lining them. If thought proper, and in very pronounced cases I think it undoubtedly is so, a circular incision may be made on the opposite side.

After division of the sphincter, a greased roll of lint three inches long and an inch or so thick should be left in the anus for twelve hours, having been introduced before the speculum is withdrawn. It tends to prevent hemorrhage by moderate compression where the mucous membrane has been incised, and to control effusion of blood beneath the mucous membrane and into the lax peri-rectal structures when the division of the sphincter has been submucous. The bowels should remain quiet for forty-eight hours, when a mild laxative may be administered. The patient must be kept recumbent in bed, even while passing her motions, for at least two weeks, or even longer, and until the condition of the rectum is satisfactory the bowels must be kept loose and solid stool prevented. After she is allowed to get out of bed, sitting or standing long must be prohibited. When she is able to go out, the same precautions should be observed. Frequent going up and down

stairs and long walks ought to be forbidden, and some hours every day should be passed upon the lounge. The function of the liver in all these cases must be especially watched. Coffee, spirits, fermented beverages, sugar and much fatty substances should not be allowed, if hepatic ischemia due to malaria, the gouty or rheumatoid diathesis, or chronic saturnine intoxication be recognizable as a factor in the general vascular turgidity of the pelvis, of which the rectal trouble is an effect and expression.

In conjunction with recumbency and the systematic use of laxatives, and, when indicated, of remedies directed towards a proper regulation of the hepatic functions, the hot vaginal douche taken twice a day should be advised. The beneficial effects of the douche are not limited to the genital organs, but extend to all the pelvic structures. Astringent enemata should be systematically employed. Every morning and evening after the douche, the rectum should be washed out with warm water and five or six ounces of matico infusion injected and retained. It is my custom to begin with the injection of matico as soon as all danger of hemorrhage is past after the operation, and the primary swelling and pain are abated. The matico should be continued during several months, at first twice a day, and afterwards in the evening, in conjunction with sulphurous laxatives in the morning, and the mineral acids and some iron after meals.

An indication of primary importance in the after treatment of these cases, when a decided version co-exists with some degree of procidence, is to elevate the uterus and ovaries by an appropriate pessary. But few forms of pessaries, however, are adapted to the conditions present. Pessaries which require an intravaginal support bear upon the recto-vaginal septum and perineum, and can be seldom tolerated. They press upon, rub and irritate the lower part of the rectum quite as much or more than the uterus itself which they are designed to remove from its abnormal position, causing much distress and pain, and even eversion of the mucous lining of the bowel through the anus. An

elastic ring may be tried and may suffice. If it does not, our only recourse is to instruments, which are supported from without by a stem. This stem should be straight and not curved as in Cutter's pessary. This instrument depends for maintenance of its position mostly upon the curve of its stem, which is designed to rest upon the floor of the vagina, hugging the perineal body, and is objectionable for these reasons. Herrick's pessary consists of a straight stem of silver with branches supporting an elastic ring to fit around the uterus; it is supported from without by tapes, both in front and behind, attached to a belt around the loins. It is very lightly constructed and will be found quite efficient, more so than other instruments of its class.

When all that is surgically indicated has been done for the genital organs and rectum, a modification of Weir Mitchell's treatment will be found highly advantageous, indeed indispensable. The absolute rest and recumbency insisted upon by Mitchell in the early part of his treatment will have already been observed in the treatment after the rectal operation, though not so fully as Mitchell advises except in the worst cases. What we want to do now, after our patients are able to get up, is to start them properly equipped on the road to health, and to excite and support the languid functions of nutrition. Many patients suffering at once from uterine and rectal disease have been chronic invalids for a very long time. They are pale, haggard, anemic, nervous, hysterical and dyspeptic. They have been accustomed to take but little food, scarcely any exercise, and sleep badly, or only under the nightly use of hypnotics. As soon after operation as the patient is able to bear it, she should be submitted to daily massage and electricity, and to superabundant nourishment with milk and broth, at frequent intervals, somewhat after Mitchell's system. She should be directed to take a short, brisk walk after light refreshment as early in the morning as possible, and after breakfasting at nine, and attention to her douche and astringent enema, to recline

until mid-day. Milk and broth, in quantities daily increased, should be taken every two and a half or three hours, until 10 P. M. Electricity should be used in the morning, about 11 A. M., and the massage thoroughly given for an hour from 5 to 6 P. M. Some hours after dinner must be spent upon the lounge, and the patient should retire to bed early. The rubbings should be made with cod liver oil, two ounces of this being worked into the skin every evening. I have found the oil applied in this way highly nutritious and beneficial. Notwithstanding its odor, it may perhaps prove a better application than the cocoa-oil recommended for this purpose by Dr. Mitchell. As the patient improves, she should at first ride out in the afternoon, and afterwards take an evening walk. For a long time, however, it will be necessary to forbid long walks, or much standing, and until she is quite well all domestic care must be dismissed.

I beg leave to be allowed to close this paper with the final words of Barnes' suggestive lecture. "One lesson," says Barnes, "will be drawn from the clinical deductions made in these studies of the relations of the bladder and bowel distress to disease of the neighboring structures. You will see how impossible it is to prætermit close examination of the surrounding organs without serious risk of overlooking conditions that may be fatal, if neglected, and which may be remedied if discovered. While we are looking at the kidneys, or the intestine, because they are disturbed in their functions, it may be the uterus or the ovaries that are in fault. We thus see how dangerous it is to practice in the spirit of pure specialism; how absurd it is to map out the body, and assign particular territories to particular classes of practitioners. You will see how intimately, how indissolubly, that part of medicine which takes for its basis the particular study of the generative system in woman is linked with the disorders of the alimentary, vascular, and nervous systems; that is, a pure specialty cannot exist. A more monstrous thing cannot be conceived."

EXTERNAL MANIPULATIONS IN OBSTETRIC PRACTICE.

BY GEO. J. ENGELMANN, M. D.

[*Read before the St. Louis Obstetrical and Gynecological Society, Oct. 18, '83.*]

OLD and well known, familiar to many, as these methods are in obstetric practice, they have been, I may say, rather instinctively resorted to by the ignorant, than used, defined and developed by the scientific practitioner. Though at all times frequently resorted to, Credé was the first to call attention to one of these manipulations for one particular purpose, and elevate it to the rank of a scientific method. They are all valuable, and deserve greater attention and study than has heretofore been devoted to them on the part of the obstetrician. Universally used by primitive peoples, crudely practiced by many, highly esteemed by some of the most advanced obstetricians, they have not been sufficiently regarded to become a generally-acknowledged, useful, scientific aid to the practitioner.

External manipulations, especially massage and expression, are an aid to the abdominal muscles and uterine forces, and of great importance in the management of labor, as an aid in the same direction with that force so necessary to the normal expulsion of the fetus, the *vis a tergo*. Though appreciated and advocated my many leading obstetricians, they are not as yet the common property of every practitioner; they are valuable agents in the hands of every one, harmless if properly directed, and if more thoroughly understood and more frequently resorted to would, with the assistance of proper posture, accomplish all the objects for which ergot is given, and do away with any one indication for the use of that dangerous drug.

Massage and expression being the only resources in the hands of primitive peoples for the completion of difficult labor, they intuitively, by instinct and by long practice-

not by scientific reasoning, of course—have brought them to a certain state of perfection, although brute force is more relied upon than dexterous manipulation. The methods are so simple, so natural, and so thoroughly in accordance with sound mechanical principles, that they have produced good results. Deprived of the brutality of physical force, and aided by science, these very means which have so long and so well served the ignorant will attain a high degree of perfection, and will serve far better the scientific obstetrician.

The physiological effects of massage are readily seen. The circulation is improved, absorption is furthered, pain is eased, the nerves are strengthened, the nervous system is quieted, and the physiological activity of the body increased without cost of fuel, muscular or nervous exertion, to the patient; there is a probability of greatly stimulated idio-muscular contractility, and it seems as if massage had an effect similar to electricity upon the muscles; the contractions thus aroused are a great factor in the process of absorption.

The importance of massage in obstetric practice is at once evident; its soothing, nerve-quieting influence allays the excitement of the patient, and the muscles are stimulated to increased activity. It serves a most excellent purpose in uterine inertia; whilst absolutely harmless, uterine activity is increased, the expression of the child hastened, and, after it is delivered, contraction and involution furthered; atony may be thus overcome and hemorrhage checked; but pressure upon the fundus, the direct *vis a tergo* expression, is, above all others, one of the most important factors in obstetric practice, and, by reason of its simplicity, within reach of every one.

The external manipulations so serviceable in obstetric practice are:

1. The use of the hands for the rectification of position.
2. Massage.
3. Expression.

The rectification of position by external and combined manipulation is already well established in obstetric practice, and appreciated as a valuable scientific method, so that I shall confine my remarks to the uses of massage and expression.

Let us first consider *massage*, under which term may be comprised the various external manipulations practiced for the purpose of inducing uterine activity, friction, kneading and compression.

The use of friction with the palm of the hand, gently curved, upon the fundus of the uterine globe, for the purpose of exciting muscular activity, should be more frequently resorted to both to stimulate labor pains and to correct those irregular, varying and painful, but ineffectual pains which so often accompany the first stage. With firm and steady but gentle pressure, the hand is passed over the abdominal walls, above the uterine body, following the circular fibers of the fundus. This, of course, is most useful before expulsion of the ovum, when the uterus is large and prominent, easily reached, though also of service in the third stage of labor, and even after expulsion of the placenta. The benefit is an evident one; as has been stated, it is quieting, soothing, especially under the conditions of nervous excitement caused by these irregular pains, and muscular contractility is stimulated; the effect may be compared to that of electricity. It is harmless, and we can thus at times correct those painful, ineffective efforts of the womb, or arouse and strengthen its healthy contraction.

Equally important is massage proper, the kneading or compressing of the uterine globe—not to be confounded with expression, the mechanical forcing out of the contents of the cavity. This is more like the kneading of other muscles in general massage, or shampooing, serviceable only when the size of the organ has been reduced, in the third stage of labor, after expulsion of the placenta, and in abortion. The fundus or sides of the womb are grasped anteroposteriorly between the ball of the thumb and fingers of one

hand, and gently squeezed—compressed. This is not only a powerful exciter of uterine contractions, but also directly aids in expelling the contents of the cavity, and can, when necessary, readily be combined with *expression;* the latter is an equally important manipulation, which has played an important part in the history of midwifery of many of the primitive people through all times. It was their only hope; the only way in which they could force labor, in which they could express the unwilling fetus from the womb—a *vis a tergo* which was their only resort.

Primitive peoples have various uncouth methods of practicing expression, the best of which are, perhaps, the tightening of a belt, the leaning with the uterine fundus against a staff firmly planted in the ground, or lying flat upon the ground with a pillow under the abdomen. A very effective and simple method is by encircling the body with the arms and pressing upon the womb, with the palms of the hands clasped above the uterine globe, when the patient is seated in the lap of an assistant, when she is kneeling, squatting or standing, compressing the abdomen and pressing the womb down from above during each pain; a bandage passed around the body and tightened by assistants answers the same purpose as the encircling arms. An equally severe method adopted in retarded labor, and still advised in some of the modern works on obstetrics, is to have the ends of a towel or sheet, which is passed around the abdomen, crossed behind, each end being grasped by an assistant, whose duty it is to make firm traction upon the sheet, and especially to draw it tight as the abdomen diminishes in size, being careful to make traction in the intervals between the pains, lest the fetus during this time should resume the position it occupied previous to the occurrence of the pain.

Expression is most conveniently made, under the circumstances in which we usually find the parturient woman, by the physician seated or standing at the bedside—best standing—the palm of his hand laid over and

gently clasping the uterine fundus, slowly compressing this and forcing it in the direction of the pelvic axis, an excellent method, which has of late become quite popular in one of the cases in which expression is of service, in the expression of the placenta, when the uterine globe has been greatly diminished in volume. In expression of the after-coming head in breech presentations, where it is an assistance of the utmost importance, where the manipulations of the accoucheur are greatly aided, and often ineffective without proper expression by the hands of an assistant, the practice is somewhat different. In this case, as well as in the expression of the body of the child, whenever the uterus is large in size, it should be made by the hands of the assistant standing or kneeling by the bedside, facing the patient's lower extremities, the palms of both hands upon the uterine fundus, the thumbs and the balls of the hands together upon its center, the fingers snugly encompassing the body and the sides. The line of pressure varies with the plane of the pelvis occupied by the part to be expressed, and should be made firmly during a pain or during the efforts at traction. It is a steady pressure in the direction of the pelvic axis, usually made either to aid the entry of the head into the inlet, straightening the oblique position of the womb and forcing the head to descend, or to assist the abdominal muscles during its expulsion; but, above all, to aid in the delivery of the shoulders and after-coming head.

Of these external manipulations, both massage and expression are valuable factors in the management of ordinary labor. Friction, to arouse labor pains and correct them if irregular, mitigate suffering and augment their force, especially in the first stage of labor, though useful also in the second or third. Massage, kneading and compression become of service as labor progresses, as friction is less applicable and the womb diminishes in size; to improve and strengthen, to stimulate the efforts of the uterine muscle, both during labor proper, the second and

third stage, as well as after expulsion of the placenta to effect permanent contraction; the latter being, perhaps, one of its most important objects. Expression is resorted to in aid of the abdominal muscles, indirectly of the uterine muscle. It heightens the effect of abdominal pressure; it fixes the uterine fundus, aids the muscular contractions, and keeps up the effect during their interval; it is of service in rectifying the obliquity of the womb, in directing the presenting part into the pelvic inlet, in forcing it through the outlet, but especially in the expulsion of the shoulders and after-coming head, and in delivery of the placenta.

THE TONGUE.

By J. C. Webb, M. D., Milan, Mo.

THE tongue being covered with a mucous coat which is continuous throughout the stomach and bowels, makes the appearance of this organ of importance as an index of the numerous morbid changes to which the system is liable.

I propose a brief notice of some of the various alterations in its appearance, as an assistant in detecting the true character of disease. In the examination of this important organ, the condition of the fauces and mouth should be closely noticed, as those parts influence very much the size and color of the tongue, even in cases where the general system is not deranged.

The tongue is so intimately connected with the digestive organs, and those of the chest and pelvis, by contiguous sympathy, that it is an important diagnostic of disease; but as its appearance varies in different diseases, in proportion to their violence and local seat, I shall first notice the alterations peculiar to febrile diseases, acute and subacute inflammations; and secondly, those of debility, as chlorosis, etc.

First—In fevers from simple functional derangement, the tongue is soft and slightly covered with a white fur, being more or less lubricated with saliva, indicating partial suspension of the natural secretions. If the liver be the principal organ deranged, the fur in a few days will assume a sallow hue, with diminished moisture of the tongue.

This color and appearance will then be subject to daily change, if high irritation or inflammation supervene, and in proportion to the degree of morbid action will the coat change from a yellow to a dry, brown appearance; but if the attack be within the alimentary canal, the changes of the organ will vary in proportion to the violence of the irritation, inflammation and local seat. An irritable stomach in febrile disease produces a white fur; if the irritability be increased, the tongue not unfrequently becomes clean, dry, and of a florid color. When the duodenum becomes the seat of irritation or inflammation, the tongue is not generally as dry as when the stomach is similarly affected, and is more inclined to assume a bilious fur, though in other respects of similar appearance.

When the force of febrile action is thrown upon the jejunum, it varies from a natural appearance through all the shades from white to a black, dry coat, the tongue being more or less affected with nervous tremor. When the ileum is the local seat, it is coated most generally with a slightly whitish fur, which is liable to pass off in flakes, leaving the organ smooth, with a glossy, red appearance; sometimes a smooth streak will be found in the center, and fur on each side. In such cases the tongue is contracted and very red at its edges, which denotes high irritation or the approach of inflammation. All forms of inflammation of the ileum produce the symptoms of typhoid fever to a greater or less extent, and in febrile diseases of the small intestines the nervous tremor varies in proportion to the morbid condition of the alimentary canal. If the irritation or inflammation extends to the colon in febrile disease, producing diarrhea, the tongue will be found red at its point and edges,

its center being sometimes furred and sometimes smooth; if internal congestion supervenes, the tongue will assume a dark livid hue.

In bilious remittent fever, it presents the various appearances seen in all grades of fever, owing to the irregularity of the local seat of the disease. Hence the tongue may be smooth and glossy in one case, and red and dry in another, while in a third it may have a coat of bilious fur, and in a fourth a black, dry, rough coat at the center, with the edges red and chapped so as to bleed. In the forming stage of true typhus fever the appearance differs from that of simple continued or remittent fever, when the local seat is in the small intestines—the white fur being thicker and more slimy, which, as the disease progresses, becomes brown, dry and black; whilst in continued or remittent forms there is not such regularity as in typhus. In true typhoid fever the fur and color are various; the coats are frequently thrown off, leaving the organ with different appearances, as before stated. But in all grades of fever, where the tongue has a red purple hue on its edge and surfaces, it is an evident mark of secondary congestion, produced from high irritation or inflammation.

In cholera, such appearance is not present until after the system has reacted and established inflammation, although in this disease the most extensive congestion prevails.

The tongue, in secondary fevers arising from wounds, contusions, etc., is variable, in accordance with the locality and extent of the injury. Where the scalp is wounded, establishing morbid vascular action, the tongue will be covered with a thick white fur in the onset, which will assume a bilious character in a few days, owing to the influence which wounds of the scalp produce upon the liver; but in wounds of other parts of the system, the thick white fur will vary from a clammy to a dry condition.

In inflammation of the brain or its meninges the tongue is contracted and pointed, and the fur is of a bilious order. In all forms of fever where congestion supervenes, so as to

produce stupor, it is relaxed and expanded. In catarrhal affections and scarlatina, the papillæ may be seen protruding through the white fur, of a florid color; in catarrhal cases the tongue may become smooth and red, but in scarlatina it rarely presents this appearance. In sub-acute diseases, located in either of the cavities, the appearances of the tongue vary in accordance with the organ affected, and the extent of the affection and condition of the secretions.

In dyspepsia, the tongue is generally coated on its back portion with a heavy fur, varying in color from a darkish white to a yellow; but in mild cases it is only slightly coated, and in proportion to the chronic lesions of the different parts of the alimentary canal it varies in appearance, being sometimes red, livid, and smooth on its surface. If the liver be affected, the fur is generally of a bilious character, and where the system becomes debilitated it has a relaxed, flabby appearance, with a long fur in the center and back portion.

In chronic hepatic or gastro-enteric disease, the fur varies from a white to a yellow, and the contracted or relaxed appearance will vary in proportion to the irritability and tone of the system.

In strumous habit the appearance must of necessity vary in proportion to various stages and organs affected, so as to represent the alterations of the tongue, as noticed by medical authors, under acute and chronic forms, as all parts of the system are liable to be affected with the disease, giving rise, in the inflammatory stage, to the appearance of fur and other alterations, as observed in different stages of febrile disease, with exception that the tongue is found more uniformly relaxed, paler and more tumid.

Where the disease terminates in tubercular phthisis, it generally retains its natural appearance until the mucous coat of the stomach and bowels participate in the morbid action, when the tongue is smooth and soft, the result of general debility. The same appearance of the organ is pro-

duced from psoas abscess, white swelling, or any excessive drain from the system, which should admonish us in febrile disease that debility is in combination with febrile lesions produced from inflammation, irritation or functional derangement.

In general debilitated conditions of the system, produced from deranged functions, as in chlorosis, a very different appearance of the tongue presents itself, which is pale, tumid, with enlarged papillæ, and as the debility advances, the organ becomes paler, more flabby, and eventually smooth.

Hence our diagnosis must be made from a wide sphere of morbid changes; in some cases from local causes, in others from general defects, such as inherited disease, functional derangements, inflammations and organic lesions. It is known that the most prominent marks are frequently delusive, from the fact that the affection is not always uniform.

Many diseases that appear to be of a general character are found to have their origin from some obscure local affection. In such cases the diagnosis can only be formed by taking into consideration the predisposing and exciting cause, and by watching the changes in the secretions produced by remedial agents.

Therefore, there is but one source to make out a safe diagnosis. This must be made by contrasting the healthy actions of the organism and the morbid changes produced from surrounding causes. Those who expect or hope to profit by correct diagnosis must make themselves acquainted with the organization of man, and the different symptoms that are likely to arise from the morbid action of the different systems composing the organism, together with the condition of the mental faculties, the tongue, skin, countenance, urine, expectorations, or exhalations from the lungs, and from the alvine discharges. This acquaintance, with a careful exploration of the organs of the chest and abdomen, is necessary to form a correct diagnosis.

We may often learn much from the manner in which a furred tongue begins to clean. Thus it is a sign of a rapid and lasting convalescence when the fur slowly retires from the tip and edges, thinning gradually as it recedes. When it separates in flakes and patches, beginning at the middle or near the root of the organ, and leaving a smooth, red, glossy surface, the convalescence is apt to be more tedious and interrupted. Sometimes the fur recurs again and again before ultimately disappearing, especially in cases where the advance toward health is uncertain and unsteady.

And lastly, when the crust is rapidly removed, and the exposed surface left of a raw appearance, or glossy, or fissured, or dark-colored, the prognosis is unfavorable.

PAIN KILLERS.—"*New Idea*" gives the following as the composition of two of the much advertized "pain killers:"

1. *Richter's Pain Killer.*—From 100 parts of capsicum make 600 parts of tincture; add a solution of 22 parts of soap in 100 of water; add:

Water of ammonia,	300 parts.
Camphor,	30 "
Oil of rosemary,	10 "
Oil of lavender,	10 "
Oil of thyme,	10 "
Oil of cloves,	10 "
Oil of cinnamon,	1½ "
Sugar coloring,	q. s.

Mix and filter.

2. *Perry Davis' Pain Killer*:

Myrrh,	2¼ lbs.
Capsicum,	10 oz.
Opium,	8 "
Benzoin,	6 "
Guaiac,	3 "
Camphor,	10 "
Alcohol,	5 gals.

—*New Remedies*, Sept., '83.

CASES FROM PRACTICE.

ST. LOUIS HOSPITAL, MEDICAL DEPARTMENT.

Service of L. L. McCabe, M. D.

Case I.—Malignant Jaundice.

E. S——, aged 22, single, clerk, German, entered hospital Aug. 9th, A. M. Quiet delirium; could be roused to answer a question or two, and would then again relapse into delirium. Whole surface of body intensely jaundiced; general hyperesthesia; complained of pain if any portion of body was touched.

Temperature normal; pulse 58; respiration about ten per minute. Vomited once or twice, black, grumous blood. Bladder empty. Inferior border of liver two finger-breadths above costal margin. Pupils dilated.

Previous History.—Had been in this country eight weeks. Habits very temperate. Taken sick Aug. 5th with headache and general malaise.

Aug. 6th.—Some fever towards evening, and slight delirium.

Aug. 7th.—Becoming jaundiced. Vomited some black blood. Passed no urine since noon, Aug. 6th.

Aug. 8th.—Jaundice and delirium increasing. No urine. Vomited more blood.

Aug. 9th.—Entered hospital. Gave mercurials and diuretics.

Aug. 10th.—General condition about same. Liver dullness decreasing. Bowels moved freely during night. Stools contained a quantity of black, grumous fluid. Kidneys acting freely. Urine, dark-brown; sp. gr., 1019; acid; presented reaction of bile-pigment. No albumen.

Ordered mineral acids, and bowels to be kept open with salines.

Aug. 11th.—Delirium lapsing into coma. Bowels and kidneys acting freely. Not so much blood in stools. Urine same. Some sweating during night, staining linen a bright orange.

Aug. 12th.—Liver dullness entirely disappeared. Bowels and kidneys acting freely. Coma complete. No convulsions. Death 1 A. M.

Aug. 13th. Autopsy twelve hours after death. Body a deep yellow; a few purpuric spots. Heart and lungs healthy. Liver of an ochre-yellow color; decreased about one-third in size, but especially in its thickness; very soft. Anterior and superior portion of left lobe pulpy. Gall-bladder contained about two ounces of bile. No hepatic cells visible in the softer portion; instead, brown granules, oil globules, particles of coloring matter, etc. Kidneys slightly congested. Spleen small and very friable. Bowels contained some black, tarry matter.

CASE II.—TYPHOID FEVER, WITH HEMORRHAGE, ETC.

V. L——, æt. 30, German, single, entered hospital Aug. 9th, with a well marked attack of typhoid fever. The fever pursued its regular course till the 14th, when the morning temperature was as usual 103.5°; at 5 P. M. it was 100¾°. During the night profuse hemorrhage from the bowels. Next morning the thermometer registered 101°. The temperature gradually increased till the 18th, when during the morning it was again up to 103.5°, and remained so till the 20th, when it fell to 101.5°, followed by another profuse hemorrhage from the bowels. By the 23d it was up again to 103.5°, remained so for two or three days, and then gradually began falling till by the 31st it was normal. Everything progressed nicely until Sept. 12th, when, without any assignable cause, the patient had a relapse, the thermometer showing a morning temperature of 103.5°; Sept. 13th, 103¾°; Sept. 15th, 104¼°. After this there was a gradual decline, and by the 24th the case was again convalescent.

Patient left hospital Oct. 12th, well.

ST. LOUIS HOSPITAL, SURGICAL DEPARTMENT.

Service of DR. N. B. CARSON. Reported by PAUL Y. TUPPER, M. D.

CASE III.—DIFFUSED ANEURISM—LIGATION OF THE BRACHIAL.

H. J. G——, American, aged 29, brass finisher by trade, entered July 3d.

History.—Three days before entering, received a pistol shot

in right arm about three inches above elbow. The ball, which was not large, entered the arm on its outer aspect, passed between the biceps muscle and humerus and emerged on the inner side. The points of entrance and exit were about on the same plane. Considerable hemorrhage immediately followed. This was checked by the firm application of a compress and bandage. Patient does not remember whether the hemorrhage was arterial or venous in appearance.

Present Condition.—July 4. Arm is inflamed, hard and painful at site of injury. From wound of exit of ball a slight sanious fluid exudes. Surface thermometer registers 99⅘° F. over most inflamed point. Axillary temperature (opposite side) 100⅕° F. Pulse, 88. Applied plaster of Paris splint from finger tips to shoulder, the forearm being at a right angle with arm.

July 5. Temperature, 99° F. Pulse, 82. Inflammation less. Arm comfortable.

Gradual improvement in the local condition for five days—the surface thermometer indicating an almost normal temperature of the part.

July 10. Lymphatics on inner side of arm inflamed. Wound does not look so well. Is inflamed.

Removed splint. Ordered poultices and rest.

July 14. Temperature and pulse normal. Considerable inflammatory infiltration. Oozing almost ceased. Wound of entrance closed.

July 16. Pain in distribution of median nerve.

July 17. Aneurismal bruit and thrill detected just below junction of middle and lower third of brachial. Absent when pressure made on vessel above, or when forearm firmly flexed. General inflammatory infiltration prevents the detection of any lateral expansion of aneurism. Right radial pulse not so strong as left and rather more tardy. Pain along distribution of the median increasing. Ordered extreme flexion of forearm to be kept up constantly, allowing only short intervals of rest.

July 25. Tumor now about size of walnut, but seems harder. Small blod clot turned out of wound of exit.

July 28. Went out on street and had slight hemorrhage from wound. Some bloody oozing now.

July 30. Oozing continues. Compression of tumor has so far proven ineffectual.

August 2. *Operation.*—Ether. An incision of about three and one-half inches made on inner side of arm along course of lower third of artery, and immediately over tumor. Aneurism found to be of the so-called *diffused* or *consecutive* variety. The artery was divided. The walls of the aneurism were formed by the biceps, brachialis anticus, and triceps muscles and condensed cellular tissue. Median nerve contused, but not otherwise injured. Large clot turned out from beneath the biceps, and ligatures cast around both the proximal and distal ends of divided vessel. Lips of wound left open. Dressed cavity with iodoform and lint. Cotton batting applied around entire arm to maintain its warmth until circulation restored. Ordered morph. sulph. gr. ¼ when pain.

August 3. Temperature, 99⅕° F.; pulse (left radial), 74. Rested well. Arm comfortable.

August 4. Temperature, 100⅖° F.; pulse, 96. Wound discharging. Washed out with solution of tr. iodinii co., ʒij, water ʒx. Introduced drainage tube. Dressed with oakum.

August 5. Temperature and pulse normal. Tube drains well. Discharge is of thin, purulent character. Not offensive. Some pain still along distribution of median nerve.

August 13. Removed drainage tube. Discharge slight.

August 21. *Discharged.* Wound healed. Some hardness still remains at site of operation, but is gradually disappearing. Occasional pain along median. Patient in good condition and is using arm.

GUN SHOT WOUNDS.

BY E. R. DUVAL, M. D., FORT SMITH, ARK.

[*Read before the State Medical Society of Arkansas, at the Eighth Annual Session, held at Little Rock, May 30, 31, 1883.*]

Sam. Wakefield, negro, aged 29 years, was shot by I. B. Slaughter, July 24, 1882, two miles east of Ft. Smith, and was conveyed by railroad to his home the same evening.

The pistol used was a 44 Colt's revolver, and the shots fired by the the aforesaid Slaughter at Wakefield, were three, all

of which took effect, viz: the first entering externally the left thigh four inches below the coxo-femoral articulation, ranged upwards and inwards, emerged from the thigh one-half inch below the groin (left), and then entered the opposite thigh one-half inch below the hip joint, ranging obliquely downwards and outwards, producing in the right femur an oblique fracture in the lower part of the upper third, and then emerged from the limb. The left thigh sustained no injury other than a flesh wound. The right femur, however, as is shown, was fractured. The second shot entered the right thigh four inches above the right knee joint, and passed directly through from left to right without interfering with its osseous continuity. The two balls that entered the two lower limbs made six distinct openings.

The third shot entered the left arm three inches above the elbow joint; ranged downwards and forwards; fractured and comminuted the humerus in its lower third.

The negro at the time of the accident was suffering from chronic malarial toxemia, and therefore in no good condition to bear the shock and the loss of blood necessarily incident to a gun-shot wound.

The loss of blood was inconsiderable and the nervous shock not excessive.

Temporary dressings of cold water were applied to the wound and a full dose (one grain) of morphia was administered, and at 8:30 A. M., the next day, July 25th, the fractured thigh was put up in Physick's Desault apparatus and the arm dressed with cold water and paste-board splints. Extension was carefully maintained by adhesive strips one and one-fourth inches wide applied to the leg to within an inch and a half of the knee joint, and long enough to extend beyond the foot four or five inches. These strips constituted the extending bands, and they subserved the purpose admirably. Dr. J. E. Bennett, of this city, was the attending physician and surgeon, and I the associate. For ten consecutive weeks we gave the case our assiduous attention. It would be needless to give in detail the treatment pursued,

The malarial complication was met by anti-periodics, quinia being used or administered as indications warranted. Lateral support for the injured limb was secured by bags of wheat

bran; air cushions for bed sores, bromo-chloralum for disinfection. This combination possesses a superiority over all other antiseptics that it has been my fortune to essay. Being odorless itself, clear and cleanly, it meets most satisfactorily every indication.

At the expiration of the tenth week the wounded man was able to take up his bed and walk. Shortening of the leg was one and one-eighth inches; of the humerus one-half inch.

Remarks—The chief interest of the foregoing case to us, as civil surgeons, is the success that attended the conservatism adopted. With compound comminuted fractures in a subject anemic from malarial toxemia, a cure was secured, not alone of the fractured limbs, but also of blood poisoning. The result here is another of the many benefits I have seen follow in the work of the surgeon who, animated by enthusiasm in the cause of science, by unremitting devotion to suffering humanity conserves life and robs injuries alike to bone and flesh of their distortions.

U. S. PHARMACOPEIA.—Any person having purchased a copy of the U. S. Pharmacopeia of 1880 and desiring a list of the corrections since made therein, can procure same by sending a two-cent stamp to Wm. Wood & Co., 56 and 58 Lafayette Place, New York.

ROBERT CLARKE & Co., Cincinnati, O., will send to any address on application a catalogue of medical and surgical books from the libraries of two physicians lately deceased, which are offered at very low prices.

TRAINING SCHOOL FOR NURSES.—Arrangements are about completed for the establishment of a training school for nurses in St. Louis. It is expected that provision will be made for the co-operation of the hospitals with the training school to the mutual advantage of both.

MARRIED.—We take pleasure in extending our sincere congratulations and good wishes to Dr. F. C. Hoyt, editor of the *St. Joseph Herald*, whose marriage took place October 17th. The bride was Miss Mattie Garnier, of Richmond, Mo. May prosperity and happiness attend them through all their life.

EDITORIAL.

FEMALE PHYSICIANS IN THE EAST.

One peculiar feature of life in the Orient is the rigid separation between the sexes, especially among those of high caste. It is true that rarely, as occurred not long ago in one of the Chinese provinces, an oriental monarch or officer in high position will show such appreciation of the value of skilled medical service, and such affectionate regard for a favorite wife, as to override caste regulations and allow the loved one to be rescued from the peril of her life at the hand of an American or European male physician; but in an almost infinitely greater proportion of cases such sufferers are shut out from every opportunity of receiving skilled attendance. As has been said by the London *Times*, with reference to Indian women, it is not with them the question "between women and men doctors, but between women and no doctors at all."

The *Medical News* has lately called attention to the valuable service done by female physicians in the Zenana missions, not only in the way of supplying skilled medical attendance to the unfortunate sufferers, but by exerting a moral influence which will go far toward breaking down the "caste" system, to say nothing of the direct religious influence, for which their work will give them such opportunities as could in no other way be attained.

We have noted elsewhere the fact, which also is referred to by the *News* in this connection, that a young Indian woman of *high caste* has come to this country and entered the Woman's Medical College of Pennsylvania, with the intention of returning to India as soon as she shall have duly qualified herself to

practice medicine, and of devoting her life to the work of relieving the sick among those of her own *caste*. It is a most significant fact, and is another evidence of the advance of civilization and liberality in the parts of the world where progress has been exceedingly slow.

THE EFFECTS OF HEAT UPON CHANCROIDAL VIRUS.

Dr. P. Aubert, Surgeon-in-Chief of l'Antiquaille, has recently made and is still continuing researches as to the influence exerted by heat upon the virus of the chancroid. The experiments (as related in *Lyon Médicale*, Aug. 12, '83) were made under the following conditions: From different patients affected with chancroids, he filled vaccine tubes with virus. In each series of experiments some of the tubes were exposed to determined temperatures, while others were reserved for comparative testing by inoculating with those which had been heated and those which had not.

After repeated experiments at different temperatures, he has determined that exposure to a temperature of 98.6° to 100.4° F. for sixteen to eighteen hours causes complete annihilation of the activity of the virus. Microscopic examination corroborates the result of the inoculations. After heating to the temperature named, which is the normal temperature of the interior of the human body, he finds no more traces of pus globules, but a simple granular detritus of fetid odor, and containing numerous bubbles of gas.

He believes that the result so reached affords an explanation of many clinical phenomena which have hitherto been inexplicable. Thus the apparent non-penetration of chancroidal virus into the economy, and the absence of internal abscesses and pelvic chancroidal buboes, is explained by the fact that the activity of the virus is destroyed by the temperature of the internal parts of the body, while superficial buboes occur because

the glands near the surface are exposed to refrigerating influences which do not affect the deeper parts.

In the same way he accounts for the brief duration and rapid transformation of chancroids of the cervix uteri, and the limitation of anal chancroids to the lower part of the anus.

The cure of phagedenic ulceration by the occurrence of erysipelas has been repeatedly observed, and Benoit, of Montpellier, has noted that in phagedena there is a notable depression of the temperature. The observations of M. Aubert explain the action of the erysipelas in which there is both local and general elevation of temperature, which thus destroys the virus.

In the therapeutic application of this principle, M. Aubert says that he has tried, with insignificant results, continuous irrigation with hot water. He claims that by a sitz-bath, or, better, by a half-bath, between 104° and 107½° F., which can be kept up for several hours, the general temperature will be elevated to the neighborhood of 102° F., and at the same time the local temperature of the parts submerged will be raised, with the result of destroying the virulent action of the chancroidal secretions. He regards it as certainly the best treatment of phagedena, and cites the results of Benoit, of Hans von Hebra, and of Simmons in Yokohama, and would favor it as an efficient mode of treating chancroids, especially those complicated with phimosis, where dressings cannot well be applied. Thus, also, chancrous buboes may be transformed into simple ones before opening.

In cases where the patient exhibits a feverish state, it is necessary, by means of hot external applications, to prevent chilling of the parts, and to seek to maintain the temperature at a point approaching that of the heat of the center.

The results reported by M. Aubert are so remarkable that they need further confirmation before they can be accepted as establishing a universal principle of pathology, or as furnishing a reliable indication for therapeusis.

DECOMPOSED ANIMAL MATTER IN DRINKING WATER.

There are many questions in regard to the etiology of disease with reference to which we have only the vaguest knowledge and crudest impressions. One of the points which has been generally regarded as fully established is that the use, even for a brief period, of drinking water contaminated by decomposing organic matter and especially decomposing animal matmatter, is almost sure to engender serious febrile disease.

As bearing upon this subject in a manner contrary to what would be naturally expected, we note a case reported by J. C. McKee, M. D., Surgeon U. S. A., in the *New York Medical Journal*, Nov. 3, '83. He states that the water supply of the officers' quarters and soldiers' barracks at Fort Winfield Scott is derived from a double water-tank on the cliff, to which the water is forced by a pump from a spring. For some weeks complaint has been made that the water tasted and smelled bad. The tank was closely covered and it was at first thought to be impossible that anything could have got into it. However, on investigation, it was found that there was floating upon the surface of the water the body of a polecat or skunk, in a state of advanced decomposition, the animal having doubtless crawled in through the three-inch waste-pipe and drowned in the water of the tank.

Of course it was impossible to tell how long a time this decomposing carcass had lain in the water. In spite of the nauseous odor and taste of the water, which had been used by several hundred men, women and children during a period of some weeks at any rate, no case of illness occurred which could in any way be referred to the water.

Dr. McKee raises the query whether the poison was not in this case too overpowering to obtain a lodgment, when a milder poison would have been more insinuating and permanent. As

to that it might be remarked that a few years ago, when the old reservoir on North Market street, in this city, was abandoned, it was found that a large number of dead animals and babies were found in the deposit at the bottom. In this case the quantity of water was so immense that no unpleasant odor or taste had been imparted to the water. It is simply an illustration of the statement with which we commenced, that in many respects our knowledge of the etiology of disease is exceedingly vague and crude.

Further it should be borne in mind that the personal factor, the degree of susceptibility of the individual exposed, is quite as important as that which consists of external influences.

ELIMINATION OF MERCURY DURING AND AFTER ITS CUTANEOUS EMPLOYMENT.

Since the year 1881, Dr. Schuster, of Aix-la-Chapelle (*Journal of Cutaneous and Venereal Diseases*, Sept. 1883), has made a series of more than one hundred examinations regarding the elimination of mercury in syphilitics, who were either still under treatment by mercurial inunction, or had been so treated from one to twelve years. Most of the patients had used mercurial ointment for the inunctions; in a few, where examination did not reveal traces of mercury in the urine, the drug was employed subcutaneously. Recourse was had to the *savon napolitain* in a minority of the cases. At first only the urine was tested for mercury after the method of Ludwig-Fürbinger, as modified by Schridde, and never in less quantity than a liter. As a result of these examinations of the urine, the writer states that he found mercury in small, rarely in large, quantities, and not only during, but also some weeks after the mercurial treatment. Often, however, the mercury was *not* found in the urine, either during or after the treat-

ment, especially in those cases where, owing to the large quantity employed for long periods, it was most naturally expected. He concludes from this series of experiments as follows:

1. Mercury is irregularly eliminated by the urine—a result already pointed out by Vajda and Paschkis.

2. The mercury introduced by inunction either

(*a*) Remains stored up in the organism—a view entertained by the authors mentioned; or else,

(*b*) It is excreted by some other channel.

Schuster, therefore, in order to determine this question, proceeded to the examination of the feces, and found that mercury was *always present in large quantities.*

Omitting the chemical manipulations resorted to, we find the result of the forty fecal examinations to be as follows:

Mercury was found regularly in relatively large quantities during the course of inunctions (the earliest test was made ten days after the beginning of the treatment).

Mercury was found in the feces for five and one-half months after the end of the course; during that time it was found regularly in the fecal examinations made every ten to fourteen days.

Mercury was found in the feces in all the cases in which it was found in the urine; per contra, it was often absent from the urine when present in the feces.

After prolonged courses of inunction, mercury was found in the feces in such large amounts that it could have been determined quantitatively.

This second series of experiments shows clearly:

1. The elimination of mercury by the feces is regular, continuous.

2. The elimination of mercury after more extensive courses of inunction, say from thirty to forty-five days, is completed in six months.

3. *Accordingly, persistence of mercury in the system does not occur.*

It might be presumed that when mercury is regularly eliminated by the feces, this should also take place by the urine. The possibility the author admits, provided several liters were subjected to a test at one time. In a large number of patients who had been under Schuster's care for eight months and a year before, and who had been under mercurial treatment elsewhere for from two to twelve years, neither urine nor feces showed any evidence of the presence of mercury.

In regard to the cases mentioned by Vajda and Paschkis, where they claimed to have detected mercury in the urine two, three, five, seven and even thirteen years after comparatively short courses of inunctions, our author states that the last mentioned patients had been confined in Sigmund's syphilitic wards, where the air inhaled was impregnated with the easily volatized drug. The bearing of these apparently trustworthy observations upon questions of the greatest practical importance, is too obvious for further comment. H.

The American Climatological Association.—A meeting for the purpose of organization of an association for the purpose of studying the diseases of the respiratory organs and the influence of climate upon them was held in New York September 25th. There were responses in person or by letter from over forty members of the profession in different parts of the country. A committee was appointed to draft a constitution and by-laws, to report at the next meeting, viz: Drs. J. H. Tyndale, of New York; E. T. Bruen, of Philadelphia, and — Garland, of Boston.

The officers for the first year are as follows: President, A. L. Loomis, M. D., of New York; Vice-Presidents, F. I. Knight, M. D., of Boston, W. H. Geddings, M. D., of Aiken, S. C.; Secretary and Treasurer, J. B. Walker, M. D., of Philadelphia. The annual meeting is to be held in Washington, D. C., either immediately before or immediately after the meeting of the American Medical Association.

BOOK REVIEWS AND NOTICES.

THE PHYSICIAN'S DAILY POCKET RECORD, COMPRISING A VISITING LIST, many useful memoranda, tables, etc. By S. W. BUTLER, M. D. Eighteenth year. Edited by D. G. BRINTON, M. D. *Philadelphia: Office Medical and Surgical Reporter*, 1884.

This visiting list has been before the profession for a number of years and has been favorably received. This edition is an improvement on preceding years. It is well bound and the spring-clip cover is a feature for which special advantages are claimed by the publishers.

THE PHYSICIAN'S MEMORANDUM BOOK. Arranged by JOEL A. MINER. Fifth improved edition with clinical columns and ledger sheets. *Ann Arbor, Mich.: Joel A. Miner*, 1884.

The arrangement of blanks in this book is very ingenious, but we fear is a little too much like the *multum in parvo* pocket knives that contain such a variety of implements in one handle. Still, it is not so complicated as it at first appears, and will no doubt meet the wants of a good many physicians. The binding should be of better quality in order to make it satisfactory for service.

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston's) for 1884. Thirty-third year of its publication. *Philadelphia: Henry C. Lea's Son & Co.*

In this new edition of the Visiting List for 1884 the posological table has been revised in accordance with the new pharmacopeia, and a few other additions to the reading matter have been made. The book is excellently bound and will be welcomed by the many who have become so wonted to its familiar form that they will have no other. It will probably be used by more physicians than any other one form of visiting list.

THE ROLLER BANDAGE. By WM. BARTON HOPKINS, M. D. With seventy-three illustrations. *Philadelphia: J. B. Lippincott & Co.*, 1883. 12mo., pp. 95; cloth $1.25. (St. Louis Book & Stationery Company and J. H. Chambers & Co.)

This little book utilizes illustration to the fullest extent in teaching the details of the application of bandages. In

describing the method used in preparing the work the author says: "Each bandage was applied to a living model, and whenever the roller pursued a course which the author has found in his association with students was the cause of any uncertainty, it was at once photographed." By this method the process of applying the bandage to different parts is made perfectly clear and plain. It is the most serviceable work on this subject we have ever seen.

TREATMENT OF DISEASES OF INFANCY AND CHILDHOOD. With over four hundred formulæ and prescriptions as exemplified in the services of Drs. Jacobi, J. Lewis Smith, A. Clark, etc., etc., etc. By CHAS. H. GOODWIN, M. D. *New York: C. H. Goodwin, M. D.* 12 mo., pp. 284; cloth $2.50.

This volume is a résumé of the treatment of the various diseases incident to childhood as taught and practiced by the most successful and skillful physicians of New York and Philadelphia in their hospital and private practice. The author does not undertake to express a preference for the treatment of one over another, but states concisely and briefly the practice of each.

This is similar in plan to the volume issued a few months ago, giving the treatment of diseases of the heart and lungs. It is an exceedingly helpful and suggestive little book, but we think that the publisher has set the price rather high for such a volume.

ERRATUM.—Our attention has been called to a misprint in the September COURIER. In the notice of Dr. Wood's work on Therapeutics the price is quoted as $1.00. The price is $6.00, and no edition is published at the lower price. We regret that any inconvenience has been caused either to physicians or to the publishers by our mistake.—[ED. COURIER.

BOOKS AND PAMPHLETS RECEIVED.

Transactions of the N. Y. Medico-Chirurgical Society for 1882.——Report of Proceedings of the Illinois State Board of Health, Oct. '83.——Glaucoma. By Flavel B. Tiffany, M. D. Reprint from St. Louis Medical and Surgical Journal.———Relations and Duties of the General Profession Toward Insanity. By Jennie McCowan, A. M., M. D. Reprint from North-

western Lancet.——Physician's Visiting List for 1884. Philadelphia: P. Blakiston, Son & Co.———Physician's Daily Pocket Record. By S. W. Butler, M. D., Philadelphia.———Medical and Surgical Reporter.——Physician's Memorandum Book. Ann Arbor, Mich: Joel A. Miner.——Transactions of the Texas State Medical Association. April, 1883.———Catalogue of Medical and Surgical Books, Periodicals and Translations. Published by Robert Clarke & Co., Cincinnati.——Woman as a Physician. By Eugene F. Cordell, M. D. Reprint from Maryland Medical Journal, Oct. '83.——— Delayed and Non-union of Fractures. By N. Senn, M. D., Milwaukee, Wis. Reprint from the Weekly Medical Review, Sept., '83.———Transactions of the Colorado State Medical Society, June, 1883.——Transactions of the Medical and Chirurgical Faculty of the State of Maryland, at its Eighty-fifth Annual Session, April, 1883.——United States Salary List and the Civil Service Law.——The Roller Bandage. By William Barton Hopkins, M. D. Philadelphia: J. B. Lippincott & Co., with seventy-three illustrations; 8 vo., pp. 95; cloth $1.25. (St. Louis Stationery & Book Co.)——Principles and Practice of Surgery. By D. Hayes Agnew, M. D., LL. D. Vol. III, 8 vo., pp. 784; cloth $7.50. Philadelphia: J. B. Lippincott & Co. (St. Louis Stationery & Book Co.)——Types of Insanity. By Allan McLane Hamilton, M. D. New York: Wm. Wood & Co.; quarto in portfolio with ten plates; pp. 36, paper. (St. Louis Stationery and Book Co.)——Medical and Surgical Electricity. By Beard & Rockwell. Fourth edition, with nearly two hundred illustrations. New York: William Wood & Co.; 8 vo., pp. 758, cloth (St. Louis Stationery & Book Co.)——Treatment of Wounds. By Louis S. Pilcher, A. M., M. D., with one hundred and sixteen wood engravings. New York: William Wood & Co., 8 vo., pp. 391, cloth. (St. Louis Stationery & Book Co.)

SHAKESPEARE AS A PHYSICIAN.—We are informed that a volume with this title, by Dr. J. P. Chesney, of St. Joseph, is already in press, and will shortly be issued in good style by Messrs. J. H. Chambers & Co., of St. Louis.

THE PHYSICIAN'S POCKET REFERENCE BOOK AND VISITING LIST.—A new visiting List has just been compiled by the editor of the COURIER, and will be published in time for the New Year by J. H. Chambers & Co. It is believed to be equal to the best, and the publishers solicit a trial of the new book.

A TREATISE ON OPHTHALMOLOGY for the General Practitioner by Dr. A. Alt, is a volume soon to be published by Jas. H. Chambers & Co., St. Louis. From our knowledge of the author, and of work which he has done heretofore, we anticipate a most valuable addition to our library.

TRANSLATIONS.

DENTAL ANOMALY.

S. H. Guilford, A. M., D. D. S., Philadelphia Dental College.

Case.—Male, 48 years old, and in sound health. Toothless from birth, entire lack of sense of smell, almost entire lack of sense of taste. No hairs upon the trunk, never perspires.

The jaws presented the appearance of those of an old man who had long lost the teeth, there being no alveolar processes, though the dental arches were normal. Mucous membrane of the mouth not different from the normal. There was a superfluity of capillary growth in the axilla, pubes, and on the cheeks; but the scalp possessed only the soft, fluffy hair of infancy, while the rest of the body was entirely free from the short hairs natural to the race. Also no porosity was to be observed in the integument indicating the presence of sweat glands. The skin was always dry, and this lack of sweat caused the greatest inconvenience, since thereby his body was unable to get rid of excessive heat. Hence, in summer he was obliged to keep his clothing damp with water. While a lad he worked upon the farm, and when he allowed his clothing to dry out and delayed re-wetting, he became weak and would almost fall into convulsions because of the excessive internal heat. The heredity of this case is very characteristic. His maternal grandmother had neither hair nor teeth. His mother was normal in that respect, but a brother was toothless and hairless. Whether the function of perspiration was also absent in their relatives could not be learned. The patient's mother was married at 16 years and died in her 40th year. She bore 21 children, some being premature births, several were twin births; 18 children lived to adult age. The patient was among the later born. He was the only one toothless, though some of his brothers never cut certain teeth. Patient is father of eight children; two girls, aged 14 and 16, lack many teeth—the elder, instead of the normal number, twenty-eight, has fourteen teeth.—*Wiener Med. Woch.*, No. 36, '83.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, October 18, 1883.—DR. PAPIN, Pres., in the Chair.

Dr. Engelmann read a paper on "External Manipulations in Obstetric Practice." (Vid. p. 505).

Dr. Gregory.—When I have a case of hemorrhage I put my hand into the uterus, and also press upon it; I always made it a point to press upon the globe of the uterus immediately after the birth of the child; and I not only press it, but I shampoo it, so as to be sure of getting a contraction. I was taught this by my preceptor more than forty years ago.

Dr. Engelmann.—I think we will find that though it is an old practice it is not a common practice by any means.

Dr. S. G. Moses.—I agree with Dr. Engelmann in regard to the rubbing of the uterus, the shampooing, and all that sort of thing; yet we do find cases in which shampooing, rubbing, etc., are insufficient; it does not produce the desired effect. There is no one who has practiced midwifery for any length of time that hasn't found cases in which the uterus had become perfectly inert; the membranes were ruptured, the presentation natural, but in spite of all the uterine rubbing and shampooing there were no further uterine efforts. When I first began practice, it was a very common habit to use ergot; and, of course, I was taught in such cases to try the effects of ergot, regarding always this particular injunction, that the ergot should never be used until after the membranes had ruptured, and never unless the presentation was perfectly natural, and the proportions between the pelvis and the child normal. Now we have all of us used ergot more or less; and I have yet to find a single case, in my practice, where I have used this drug, that it did any harm either to the child or to the mother; and I have certainly often found it to restore uterine contractions when

they had apparently entirely ceased, and where I wouldn't dare to empty the uterus hurriedly by the use of the forceps. I consider that it has been in my hands a very valuable oxytocic. I never go to a case of labor without ergot; not that I use it, of course, in all cases. Where it is necessary to hasten the birth of the child from any cause endangering the life of the mother or child, the forceps are to be used; but where there is inertia of the uterus, the uterus remains perfectly flaccid, and the child is arrested, not for want of proportion of the size of the head to the pelvis, but for want of a vis a tergo, I have used ergot with exceedingly beneficial results. So far for the use of ergot in the effort to expel the child.

I was led to use ergot to prevent afterpains by a case in which I was obliged to use it, or at least I thought so, to produce active uterine contractions; and I found in that case, although the patient was not a primipara, she had had a good many children, that she had no after-pains whatever. At her previous accouchements she had suffered extremely; and in order to prevent these afterpains, and to produce a firm contraction of the uterus, I adopted the habit many years ago of using ergot after the head of the child had been expelled, or just upon the expulsion of the head of the child, and I have yet to find the first case where the least injury has been done the patient. Except in the case of primiparæ, I always give ergot after the expulsion of the child's head or while it is passing through the vulva, and I have not only found that it is advantageous in preventing after-pains, but it produces uterine contraction with the expulsion of the child. I had a case, only a few days ago, of a lady who has one child; the uterine fiber was very relaxed, and the delivery very slow; the pains were effective enough, and the os was perfectly dilated, the head presenting. Finally the lady gave birth to a healthy child, and on the expulsion of the head I gave ergot, and as the uterus was very flaccid I repeated the dose in about fifteen or twenty minutes. The uterus contracted perfectly, and she had no after-pains.

Dr. Maughs.—This very old and universally known practice of shampooing, or massage, is often of very great assistance, and often is of little or no assistance at all. Nothing is better understood, in this country especially, than the use of ergot.

Its maladministration is, I think, confined to midwives and the most obscure and ignorant of the profession; but the universal knowledge of the effect of ergot and the cases in which it should be used renders it scarcely necessary to discuss it. It is in all the text-books; and there is no possibility of anybody being mistaken about what the profession believes. There is no text-book that has been published within the last thirty or forty years—the last twenty-five years, I may say—but what has laid down explicitly the rules for the use of ergot. It is never to be given in a case where the retarding of labor is the result of obstruction, whether it be in the soft parts or the bony pelvis, from rigidity or any other cause. That is the universal law in midwifery. Like Dr. Moses, I always take ergot with me to a case of labor; I don't give it exactly at the time Dr. Moses does, unless there is some special indication. I always give a small dose of Squibb's fluid extract after the delivery of the placenta. I would give it before, if there was any special reason for it, as Dr. Moses would, but after the delivery of the placenta I would give a small dose to cause uterine contraction, and force the expulsion of any remnants of blood, for I believe that in many cases it prevents puerperal septicemia by ridding the uterus of clots; certainly it does, in many cases, relieve the after-pains by the firm contraction of the uterus and the prevention of the formation of clots, for the expulsion of which the after-pains are useful.

It should be given very cautiously during labor, if at all. You are invoking a force that you cannot control; and, if the child is not very speedily delivered, the woman may suffer from rupture of the uterus, and the child will certainly be destroyed, not from any toxic influence of the medicine, but by the contraction of the uterus, which is persistent and not intermittent. This contraction interrupts the circulation, and the child is destroyed, if not delivered very soon. Ergot should never be given by an inexperienced person, or in cases with which he is not perfectly familiar with the patient, and knows from previous delivery that there is no mechanical obstruction to be overcome by the organ, but simply a want of uterine contraction. I had a case of this sort last year, in a patient whom I had delivered two or three years before in a very lingering labor, due to inertia. This was the second or third child. Her

first labor had been protracted through inertia. I saw that it was necessary to give a dose of ergot; there was nothing else required, but simply to increase the uterine contraction, the vis a tergo. I gave ergot, and almost immediately the very next pain expelled the child. If we know from our knowledge of the patient and of the presentation and the condition of the parts that the only difficulty is inertia of the uterus, then in these cases it is proper to give ergot. I doubt very much whether it is ever necessary to give more than a ten or fifteen-grain dose to expedite delivery.

There are other equally effective oxytocics. Ten or fifteen-grain doses of quinine, freely repeated, increase the force and duration of the pains, and I am now in the habit in these cases where there is no obstruction, where formerly I would have given tentative doses of ergot, of giving quinine, and it has really a better effect on the patient. Then again I am not afraid to use the forceps in these cases. There is constantly an argument against the use of the forceps that it tends to the production of hemorrhage, because you deliver by a vis a fronte, and the uterus does not contract; any experienced accoucheur who has delivered with the forceps knows that the uterus contracts, and contracts suddenly, in nine cases out of ten. Another valuable effect of the forceps in these cases of lingering labor is this: not unfrequently the liquor amnii is penned up behind the head of the fetus, which comes down like a ball valve, fitting into the uterine os so completely as to prevent the escape of the water, and the introduction of the first blade of the forceps not infrequently causes a gush of water, and the uterus being emptied contracts upon the fetus, and it is thus stimulated to contraction by the application of the forceps. I don't know any physician who would risk the giving of ergot to a patient who had an obstruction of labor. In all the cases I have seen, it has been given by ignorant midwives or the more ignorant part of the profession.

Dr. Coles.—What has been your experience with Credé's method of expression of the placenta?

Dr. Maughs.—It is not Credé's at all; that is another misnomer. It is an old method, but Credé called general attention to it. I have been doing it all my life. I never extracted the placenta. I always express it.

Dr. McPheeters.—I believe with Dr. Engelmann that if external manipulation, embracing the various forms of it to which he alludes, was more thoroughly practiced, in nine cases out of ten it would overcome the uterine inertia during labor and obviate the necessity, or supposed necessity, for the use of ergot, which, as Dr. Maughs says, is not to be used in labor for the purpose of facilitating labor, except under very guarded circumstances; never in cases of obstruction, of course. I am in the habit of keeping my left hand on the globe of the uterus, during the pains, for the purpose of facilitating contraction and also for the purpose of securing and maintaining the progress made by a pain, and frequently, when it is necessary, of kneading and massaging; after the head of the child has been expelled, and even after the placenta has been expelled, I never release my grasp on the uterus, but by compression and by massage I seek to facilitate and augment the uterine contractions so as to prevent hemorrhage and facilitate the expulsion of the placenta. Like Dr. Moses and Dr. Maughs, I make it a rule to have ergot with me. Recently I had a case in which there was no ergot used. I failed to take it with me, and it was at a distant place; and I had a fearful hemorrhage in that case. Of course I couldn't leave the patient; and all I could do was to write a prescription and send the husband for it. But I came very near losing my patient through not having ergot. Of course the external manipulation and cold applications tended to counteract the hemorrhage; but the bleeding was fearful, the woman became pulseless, and I was afraid she would die; but by the vigorous external manipulation before the ergot arrived, the crisis was passed and the uterus contracted.

I always prescribe chloroform and ergot, and aim to have them in the house before the labor begins. I seldom give ergot prior to the birth of the child; but it is my rule to give it afterwards, for the double purpose of facilitating the expulsion of the placenta and of securing contraction of the uterus and preventing post partum hemorrhage. I look upon it as a very valuable remedy in its place. and I cannot agree with Dr. Engelmann that it is a dangerous drug when in the hands of competent persons. I don't recollect in forty years practice ever

seeing any injurious effects to either mother or child from the use of ergot.

Dr. Maughs.—I have seen half a dozen cases of rupture of the uterus.

Dr. Gregory.—I would like to ask Dr. Maughs if he has seen many cases of rupture of the uterus where ergot was not used.

Dr. Maughs.—I have not; I believe I have never seen but one case, and that was where an effort was made to turn the child while there was a spasmodic contraction.

Dr. McPheeters.—I wish to supplement my remark by saying that I consider the use of ergot very valuable in the relief of after-pains. I remember a case in which the after-pains were very severe and ran along for ten days or two weeks. We couldn't check the pains at all. She had been delivered three or four times, and in each instance the after-pains were of the most appalling character. I succeeded in relieving her the last time by the use of ergot and quinine—not such heroic doses as Dr. Maugh gives. I give it for its anti-periodic effect, and accompany it with ergot for the purpose of bringing about contraction. I think very often these after-pains can be relieved by quinine and ergot better than by anodynes.

Dr. Maughs.—I give the quinine in a different condition. I give it during labor.

Dr. Papin.—Some years ago, during the war, I recollect attending the case of a lady who had given birth to a number of children; following the delivery of each child there was retention of urine, a spasmodic contraction of the neck of the bladder, so that the water had to be drawn for six, seven or eight days. With the intention of hastening the contraction of the uterus I gave her a dose of ergot and followed it immediately after the birth of the child with a second dose, and strange to say she had no trouble in that case with retention of urine. All her other labors had been followed by this retention. I attended her two years afterwards in another labor, and did not use ergot; and for eight days I was obliged to draw her water. Some two or three years after this I met her in Philadelphia, and she told me that she had had another child in Philadelphia, but remembering the effect of ergot upon her bladder at the time I delivered her, she urged upon the physician the necessity of its use and related the circumstances to

him. He gave her ergot and she had no trouble with the bladder afterwards.

Dr. Coles.—While I think we all heartily agree in regard to the time-honored principles that the gentlemen have laid down in regard to the use of ergot, the paper of Dr. Engelmann is interesting, inasmuch as he has paid some attention to the art of obstetrics as it is practiced among primitive peoples—among savage nations. I believe that all external manipulations, such as compression, massage, etc., in order to prove an effectual aid to labor, and at the same time insure the safety of the mother and child, must be practiced on strictly physiological principles. In other words, the manipulation must not be too rough or powerful; they must not be sufficient to bruise the soft parts, otherwise we may incur great danger to the female. Dr. Engelmann makes use of one remark, if I understood correctly, which surprised me. He spoke of the external manipulations which are almost universally practiced among savage nations, and said that accidents and death were comparatively rare under such circumstances. Now I am very much disposed to doubt that. I doubt whether we have any reliable statistics on that subject. We know from our own experience in the practice of midwifery that it is comparatively rarely that we meet with cases of fatal obstruction in labor; that is to say of malpresentation and other obstructions, such as would render the use of the forceps or some manual interference absolutely necessary. We know that the women of savage nations, on account of their nomadic habits and the strong and muscular build, generally go through ordinary labor with greater facility than those in civilized life; but when you have a labor arrested by malposition, deformed pelvis, or anything of that sort, I should think that the brute force which is resorted to in such cases among savage nations would be more favorable to the bringing about of fatal results than the practice among civilized people. I imagine most of the statistics that we have on such matters come from military posts, from surgeons and missionaries who have had opportunity of examining into the details of comparatively few labors, and, it may be, that although we very seldom hear of deaths among Indians and other savage people, yet, when we come down to the bottom of the matter, we will find that there is a heavier mortality in cases

of obstructed labors among savages than is generally supposed. It is reasonable to suppose so, I think, from the fact of their unfamiliarity with the use of forceps, which, as we know, are sometimes absolutely essential; that they are ignorant of the methods of performing version, craniotomy, laparotomy, etc. The methods they pursue of expression, and other external manipulations, and which are their only resort, are in many cases so unskillful and brutal that I imagine when full and reliable statistics are secured, and we come to analyze them, it will be found that such procedures in their hands are exceedingly unscientific and hurtful.

I believe, so far as the use of ergot is concerned, that when it is thoroughly understood when, and under what circumstances to use it, it must continue to hold a prominent place in obstetrics, while massage and compression will also prove of great service, and that when judiciously employed, such methods will to a certain extent supersede the use of ergot in labor.

Dr. Papin.—My personal experience is that nearly all the difficult labors have been among muscular women.

Dr. G. A. Moses.—I think the paper of Dr. Engelmann, directing attention particularly to external manipulations as taking the place of medication, whether by ergot or other agents, for the purpose of expediting labor, is very well and useful. But if the paper is published without any objection, will we not be sending out the impression that massage, kneading and external manipulations of the uterus during the act of labor, in the first stage or afterwards, are perfectly safe, whereas they are quite as dangerous. We run almost as much risk of encouraging men to do damage by it as would be done by the intelligent use of a drug. I have read of a case in which an attendant attempted to bring about contraction of the post partum uterus by manipulations where the organ was flaccid, and hemorrhage occurring, manipulations were instituted in such manner as to compress the uterus irregularly, resulting in one of the most serious accidents—inversion—that we can have as a consequence of labor. I think it is proper that we should keep in mind the possible dangers of this extremely useful measure, at the same time that we condemn the reckless use of ergot or other drugs. Whether it be in finding a new application for an old remedy or a new practice entirely, we must

be careful that in condemning one remedy we do not run to the other extreme and incur the liability of encouraging those who are not apt or experienced to the use of a measure, feeling that it is perfectly safe, whereas it is only safe in the hands of the skillful.

It has only been lately that the question of antiseptics in midwifery has been largely discussed and their necessity urged, the vagina and *uterus* being washed with some antiseptic lotion immediately after labor. I regard this as extremely dangerous practice. In a recent discussion before the British Medical Society, experience proved that the danger which attends these injections overbalances any benefit that can be derived from their routine use.

Dr. Ford.—I have followed the old, well-established practice of using gentle friction of the uterine globe during labor when it seemed to be necessary, avoiding anything like force or injurious prolongation of such manipulations or frictions; and, of course, it has been my practice for a great many years to deliver the placenta by expression. It has been a very long time since I pulled upon the cord. I think Dr. Engelmann has done well to call attention to this method, but I think the profession has been using it a long time; and I honestly do not think anything can supplant the use of ergot in appropriate cases. I think that we are obliged to use ergot in some cases, and for my own part, when I am called to a case of labor, I always carry it with me. I think myself that it is decidedly inadmissible to give ergot when there is any obstruction; and that before the introduction of the forceps is attempted, the os uteri should be dilated or easily dilatable. We should not use ergot until the placenta is expelled, except in very special cases. I think this is decidedly the safer plan. I always give it immediately after labor for the purpose of keeping up the contraction of the uterus, which sometimes fails, and, of course, to prevent after-pains. The use of ergot just before the child or placenta is expelled is apt to produce tonic and irregular contractions. Some time ago I was called upon to see a lady who had been in labor for about three hours, and the attendant had given ergot freely before delivery; the child had been born for some two hours, but the placenta was closely grasped by the uterus. It was impossible to pass the hand

between the uterus and placenta—about one-third of the placenta presented in the upper portion of the vagina. I endeavored to pass my fingers between the placenta and the uterus grasping it, but could not do it, and I determined to use ergot: we gave a teaspoonful of the fluid extract, and after waiting just twenty minutes, a few whiffs of chloroform, and I succeeded in passing my hand in and withdrawing the placenta, which was not adherent, as the attendant supposed. A very considerable quantity of imprisoned blood and clots followed. As the effect of the chloroform passed off the uterus contracted and she had no after-pains. I am satisfied that by the use of ergot before the placenta is expelled irregular spasms of the uterus may be induced. It is not a good practice.

Dr. Coles.—What was the difficulty in delivering the placenta when you first got there?

Dr. Ford.—There was a so-called hour-glass contraction, brought about by the premature administration of ergot, in my opinion. This case furnishes, I think, a very good illustration of the powerful and true antagonism between ergot and chloroform.

Dr. Yarnall.—I would consider myself as thoroughly unarmed without ergot as without forceps in obstetrical cases. I thoroughly endorse the remarks of Dr. Moses. He expresses my ideas very perfectly. Sometimes in the early stages of labor I am induced to give ergot when contractions are sluggish; and in the last period of the second stage of labor, when I use ergot, I usually unroll my forceps so that if the ergot does not accomplish the purpose I can deliver very quickly. There is no question about the fact that the after-pains are very much less after the use of ergot than when it is not given. Ergot sometimes acts as an emetic. This is not objectionable. "A sick labor is a quick labor."

In relation to the use of compression, I will say that some years ago a gentleman from the interior of this state wrote a paper which was read before one of the medical societies, and he afterwards visited St. Louis. He was very enthusiastic on the subject, and asked me to institute a series of experiments in St. Mary's Infirmary, and with the assistance of some of the students I did endeavor to put the idea into practice, and I must say that in the first stage of labor compression

accomplished no good whatever. There is no question but what in the second stage it will oftentimes accomplish a great deal of good. I recollect in a case of a very thin, cadaverous woman with a very large pelvis, that I absolutely pressed the child out of the uterus. I delivered her by expression. There was almost comple inertia of the uterus in that case. I found, however, that in the majority of cases expression in the early periods of the second stage did no good. Sometimes I use manipulation to try to establish pains, but I have found that very little good can be done in cases of muscular and fleshy women. I believe there are some cases in which you can almost force the child through, but they are very rare.

Dr. Barret.—I must say that I have to differ with Drs. Moses, Maughs and Yarnall in regard to the use of ergot. I don't believe that there are any cases—no, I won't say that there is no case—but I believe that the practice of resorting to the use of ergot before the child is delivered is never a safe one; I do not believe it is ever good practice. In the case related by Dr. Maughs, in which he knew the patient, and knew that she had been delivered several times successfully; in which there was no obstruction; in which the pelvis was amply large, it may be very well; that is all very well so far as it goes; but how is he going to determine the size of the child's head; the degree to which ossification has gone; as to whether there is any malformation of the child. If he gave ergot in that case and an injury was inflicted I think he could hardly be held blameless. The doctor will doubtless say he gives the ergot very carefully; and that there is no danger of producing ergotic contraction of the uterus—tetanic contraction of the uterus—and I have no doubt the doctor gives it carefully, and with good judgment, but I think it is difficult to say how much ergot can be given with safety in a given case. We know that remedies act differently in different individuals, and that doses which are perfectly safe in one subject would be unsafe in another; in other words, we cannot tell what effect the ergot is going to have, and for this reason ergot is never safe in any case before the child is delivered; moreover, I don't believe it is ever necessary in those cases, stated by the gentlemen, in which there is uterine inertia, want of contractility of the uterus, to give ergot. A little rest on the part of the patient

would enable her to summon up enough force to restore the uterine contractions, and permit the labor to go on without difficulty. The uterus ceases to contract simply because it is worn out, and it seems to me that the rational course is to let the uterus rest. I think the better practice would be to give the patient a dose of opium and let her go to sleep, and I certainly think it is safer than giving ergot.

Dr. S. G. Moses.—I made this proviso: that the membranes should be ruptured, the os perfectly dilated, and that there should be no impediment detected, and that the presentation should be natural. If you waited any length of time after the membranes had been ruptured—say three or four hours, you would probably lose the child.

Dr. Barret—In the case you instance there would be no danger to the child so long as the uterus remained inactive. When it began to contract it would be much better to have the contractions set up in the normal, physiological way.

Dr. S. G. Moses.—How long would you wait?

Dr. Barret.—Until the uterine contractions returned; until I deemed it necessary to resort to the use of the forceps.

Dr. S. G. Moses.—There is one single case that I wish to relate as it was very instructive to me. I attended a woman in 1848 who had borne a number of children, although I had not attended her in any previous labor, and she had always flooded intensely; indeed, at the last labor the flooding was so immense that she came very near dying. When I was called to this case, prepared as I was by the history of her previous labors, I was very cautious in the treatment of the labor. Her children were all normal; the presentations natural. I put a bandage around the body so that I could compress the uterus, and ruptured the membranes as soon as the os was dilated and the presentation ascertained, and gave a dose of ergot, and as soon as the pains came on the child was delivered without any trouble; she never flooded, and made a first rate recovery. This is an isolated case, but it is a case in point.

Dr. Barret.—The degree of ossification of the child's head is always an important factor in labor, as is proved by the fact that a woman will have an easy labor at one time and at another time have a labor in which it is absolutely necessary to resort to assistance to enable the delivery to be completed in cases

where the pelvis is normal. I agree with Dr. Engelmann, also, in the belief that ergot is very much abused. I use ergot a great deal less than I did some years ago. I think ergot is a very depressing remedy. I think it is very lavishly and ignorantly resorted to for the purpose of producing contraction of the uterus.

Dr. Maughs.—Not by intelligent physicians of the present day.

Dr. Barret.—I don't mean that it is mal-administered; that it is given in opposition to the rules which are laid down. I think for the purpose of controlling post partum hemorrhage, if the uterus is empty of fetus and placenta, ergot may be of great value in controlling the hemorrhage, by producing contraction through the nervous centers. That is the only way in which we can produce contraction—by stimulating the nervous centers and stimulating the uterus in that way. I think it is apt to be abused when it is given before the child is delivered.

Dr. Maughs.—You and I differ so little that it would be difficult to define the line.

Dr. Barret.—I am satisfied that you never give ergot wrongfully, nor do I think Dr. Moses does, but when you promulgate the idea that it is perfectly safe to give ergot before the child is delivered, you are giving forth the idea that would not be safe to teach some members of the profession who may not be able to discriminate between the cases in which it may and those in which it may not be used; you may be misinterpreted. I think with reference to the subject that Dr. Engelmann has brought up, that of expression—that it is a valuable means, and one, perhaps, that is too much neglected.

Dr. Gregory.—I would like to ask Dr. Yarnall whether the case he was so successful in delivering by expression was among the first cases or the last upon which he tried that method?

Dr. Yarnall.—Among the first.

Dr. Engelmann.—I am very much obliged to Dr. Barret, who seems to express exactly the thoughts I intended to express, but perhaps did not. I certainly did not think that I was bringing forward anything new. They are old practices, very old and well known, and the proper use of ergot is also well known; but at the same time I think that at present there are

among the leading obstetricians those who do not consider that ergot is either so necessary, or perhaps so harmless, as has generally been supposed, and who never use it in their labors at all. I would only differ with Dr. Maughs in regard to this: He seems to think that this is all well understood. It is well understood by the gentlemen here, and if they chose to use ergot, thoroughly knowing their patients, and knowing all the conditions, they may use it, still I do not think they should permit that to go forth as a generally allowable use. I do not think that the use of ergot is quite so thoroughly understood as Dr. Maughs thinks. He says he has seen no case of rupture of the uterus where ergot was not used, but that he has seen six, and I have seen two within the last year that were caused by the use of ergot, and I think that the majority of these cases of rupture are cases where ergot is given; and I think that this goes to show that the use of ergot is not quite so thoroughly understood as some suppose. To be sure it is most among midwives that it is misused, but I believe a great many physicians look upon it as their one help in labor; and the text-books are not so strict in stating that ergot should not be given until after the expulsion of the placenta except in isolated cases. That is not laid down in the text-books, and I think physicians stretch the limit for the use of it, and give it just as the head is being expelled or before the expulsion; and I think they go further and further back. Certainly when we know how many cases of rupture of the uterus are caused by the use of ergot, I think we may safely assume that a great many minor injuries are caused to the soft parts, the cervix, perineum and so on of the mother, or injuries to the child. We do not know, of course, how many of those injuries are caused by this drug, but it seems to me that, as Dr. Barret states, ergot is an unsafe remedy at any time before the complete emptying of the uterus. It may be given by a physician who thoroughly understands its action and is familiar with the patient; but even then, as Dr. Barret suggests, he cannot know the size of the child's head, or possible malformation. Then it is not necessary to resort to it, as we have other remedies, such as the forceps, external manipulations and the expression of the child, and the stimulating of the uterus to activity by the use of quinine, friction or massage. Certainly midwives and a great

many practitioners believe that ergot is necessary in labor. In regard to the question of Dr. Coles as to the statistics which I have gathered, I will say that I have the statements of physicians and missionaries who have lived for ten or fifteen years in the communities, and who have heard only of the serious cases of labor. I have the statement of a great many such, and they have not known of a death in labor. I think it is a rule that the nearer the animal the easier the labor, as where a tribe is pure those accidents are not known; that is, where the father and mother are of the same tribe; where there is no mixture of tribes, the formation of the child's head is adapted to the shape of the maternal pelvis, and no trouble occurs. But where there is a mixture of tribes, where whites mix with the natives, there we find that there are fatal labors. That is the statement that I have received from all points.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

October 30th, 1883. DR. S. G. MOSES in the Chair.

BRAIN TUMOR.

Dr. Fischel.—I should like to present a small specimen which I think is very interesting. It is a small tumor which was taken from the anterior portion of the pons Varolii. I think there are very few cases on record having a tumor as large as that in the brain substance.

This gentleman had been ailing for two or three weeks; he was 29 years of age. He had complained of continuous headache. He looked pale and cachectic when I saw him, five days previous to his death. I got so far as possible the history of the case from the patient; all that he had to say was that he had continuous pain, that he had been under treatment, and the impression that he had received from his physician was that he had a malarial trouble. The pain did not seem to be in one part, but over the entire head. I found upon inquiry that the stomach was irritable; that the patient frequently vomited his food. Of course I made a physical examination, to determine, if possible, the cause of the irritability, and didn't succeed in doing so; there was no tenderness in the region of the stomach at all; the tongue was perfectly clean; there was a desire

for food, but an inability to retain it. The patient did not suffer from any want of sensibility at all, nor did he suffer mentally; he was perfectly clear in his mind; and, though he did not himself go down to business, his business affairs were reported to him daily and he was still able to judge of all that was taking place. This irritability of the stomach, which I was unable to ascribe to any stomach trouble, made me a little suspicious of the case. The temperature and pulse were about normal; the pulse, perhaps, a little slow, between 60 and 70. I told the patient, and his wife too, that I thought it was more serious than malaria. The real cause of the trouble was not diagnosed, and until two days previous to his death there was little change. The pulse and temperature remained normal; the irritability of the stomach continued. Forty-eight hours before his death he became comatose, and remained so until he died. So far as I could learn there was no apoplectic attack; although he might have experienced one during the night, when his wife was not conscious of it. There was no paralysis in either extremity. On making the post mortem we found the white matter at the base of the brain exceedingly soft, putaceous. It couldn't be cut into at all, it simply fell apart; if you touched it, it fell apart; the ventricles contained a great deal of serum. On cutting through the pons we found this tumor. I feel quite positive in my own mind that it had nothing to do with the other condition of the brain. The substance of the pons seemed perfectly normal. The tumor was embedded in it, but came out very easily. I don't think it is a cyst. I think it is a fibrous tumor.

Dr. Engelmann.—You say you don't think the tumor had anything to do with the other trouble; to what do you attribute the softening of the brain?

Dr. Fischel.—That is what makes the case remarkable: the clinical history of the case did not indicate brain trouble; that is, I don't think any one could have diagnosed any such trouble as that. Of course three or four days before his death I felt sure, and told his wife and also himself, that there was brain trouble; but I was surprised at the post mortem to find this condition. I was surprised because there was no paralysis: he was absolutely clear in his mind up to within 48 hours of his death, when he became comatose. There was not a condition such as

we would expect to find in a patient with such a serious disturbance of the brain substance. The patient had been in good health; he had been up north during the summer, and had come back in seemingly perfect health, and he continued so up to within three weeks of his death.

Dr. Ford.—Was there any evidence of syphilis—any history of it?

Dr. Fischel.—None that I know of; the family were entire strangers to me.

Dr. Ford.—Was there any deviation of the eyes? conjugate deviation of the eyes?

Dr. Fischel.—No, sir; the pupils contracted very well.

Dr. Todd.—I would like to ask the doctor if he noticed any change in the arteries at the base of the brain?

Dr. Fischel—No; but I did notice that there was a great increase in vascularity; the vessels of the pia mater seemed unusually distended; there was congestion of the brain I presume; at least there were red spots all through it. The vessels seemed unusually large to me.

Dr. Todd.—You think this tumor of the pons had no effect upon the basilar artery?

Dr. Fischel.—I think not; the pons itself is perfectly healthy in appearance, with the exception of this little tumor.

Dr. Engelmann.—It appears to me that Dr. Todd intended to suggest that the tumor might possibly have indirectly been the cause of the trouble; it seems strange that such a tumor in this locality should cause no symptoms. Might it not be that the pressure of this tumor upon certain vessels caused a congestion which resulted in the condition of affairs which was found?

Dr. Fischel.—I presume it might. Of course I can't say. I take it, however, that it was an acute softening of the brain. We discovered this tumor quite accidentally. I think there might have been a thrombus, or an embolus possibly. Of course we made quite a careful examination, and in cutting through the pons we found this tumor; it was the only one there. We examined very carefully for more. We were surprised that a tumor of this size should cause no other trouble. The patient was certainly in good health mentally; his mind was absolutely clear, and physically well able to move. If I

had not found the softening of the brain I should have said the patient had acute meningitis.

Dr. Ford.—The tumor must have pressed upon the respiratory centers—the fourth ventricle; and it is possible that some of his trouble, the vomiting, may have been due to the irritation and pressure. Was the gastric trouble at all chronic?

Dr. Fischel.—No, sir; not at all.

Puerperal Fever.

Dr. Schenck read a paper on "Puerperal Fever." [Vid. p. 481.]

Dr. Engelmann.—This is an exceedingly interesting and important subject, and there is only one thing that I think makes it a little difficult to express an opinion, and that is, the want of post-mortem examinations. We have heard a great variety of opinions expressed; and I am satisfied that there is foundation for a great many of those opinions. I have seen cases where we were enabled to follow them with post-mortems; and the various theories that are suggested by the various authorities have their foundations, and very solid foundations. I know that Martin has been criticised very severely, as an instance, for his theory that puerperal fever has a local origin and is really a diphtheritic process, and strange as it may appear, I know that there are facts to support that view. I think that there was not a case of puerperal fever that I saw while in Vienna during two years, and that I followed up, that there were not to be found diphtheritic ulcers in the vagina and uterus; and I left impressed with the fact that in some cases at least it is accompanied by this diphtheritic eruption. I have seen puerperal fever here very rarely; I don't recollect having seen that condition; but there it was a fact, and I suppose it can be readily explained, when we remember the class of cases. Those patients who suffer from puerperal fever are mostly those in which there has been a difficult labor; they are brought to the hospital from the city, where they were in the hands of midwives; they are difficult cases, version and forceps cases—cases of narrow pelvis, which abound there, and the genital tract was injured; the trouble was often a local expression of a local cause. This certainly was the case there.

Now I presume it is the same with regard to the other theories; local circumstances modify the expression of the trouble; and it is necessary to have a thorough knowledge of post-mor-

tem examination in many of the cases to understand what we call puerperal fever. The term, moreover, is a general one, and has been applied, no doubt, to a variety of well marked diseases.

The same infection will often show itself in different ways in different patients. Before condemning these theories, we should know something as to the class of cases which has given rise to them. We may see one class of cases, and found our opinion upon that; while others may have a different opin ion founded on equally good grounds; so that perhaps after all these different theories do not clash as they appear to, but may be brought to harmony to a certain extent. Certainly the cases which we generally call puerperal fever include very different conditions. Probably, also, in different climates it is different; I have never seen that diphtheritic sore here which was so well marked in these cases in Berlin.

Dr. G. A. Moses.—I would like to ask Dr. Schenck if he made any post-mortem examinations during the epidemic here referred to?

Dr. Schenck.—Yes, sir.

Dr. Moses.—What lesions were found?

Dr. Schenck.—I didn't find any at all.

Dr. Moses.—The serious effect of the disease in the Vienna Hospital may have been due to some local cause. It will be remembered that puerperal fever became so common at one time in the lying-in ward of the Pennsylvania Hospital that the ward was thoroughly cleaned, whitewashed and renovated, and after being abandoned for six or eight months or a year, was again occupied, when it was found that puerperal fever again presented itself. Now this certainly must have been due to some local infection in that particular ward.

Dr. Ford.—I would like to ask Dr. Schenck if he has noticed in his experience, which has been quite ample, any connection between excessive hemorrhage and the development of puerperal fever—or that form of puerperal fever which he insists upon as distinct from other fevers. Have you observed the idiopathic puerperal fever to depend upon or follow very closely upon large losses of blood or difficult labors, long protracted labors, and labors occurring under disadvantageous circumstances?

Dr. Schenck.—I have seen cases of sapremia and also cases septicemia which seemed to be connected with this; but this peculiar disease that I spoke of as having attacked the lying-in department in 1875 was not of that character; there was nothing whatever abnormal about the delivery of those patients—the labors were perfectly normal. There was no unusual hemorrhage or anything of that kind; there was no discernible cause for it outside of the epidemic influence; but they were quite different in their character from cases of sapremia and septicemia, such as we constantly see in lying-in wards; there was no local cause for it that could be discovered.

Dr. Lemoine.—How many post mortems did you make, and what was the proportion of deaths?

Dr. Schenck.—I don't remember exactly; the mortality was very great; the patients almost seemed to be doomed from the very first.

Dr. Lemoine.—Have you seen many of such cases in your private practice?

Dr. Schenck.—I have never seen any in private practice, but at the time the disease was prevailing very extensively in St. Louis; at least there were a great many certificates given for that disease; of course you must make due allowance. I find that many physicians call fevers puerperal fever which are not really so; this is especially true if the patient dies.

Dr. Engelmann.—I will allude to a case in point, and one in which the effect upon the nervous system played a very important part; a case that I lost in a hospital here; this and one other are the only two cases I have lost. The first one was a young lady, the daughter of a physician, who had come here from a distance. She was a very excellent girl, but had been misled, and took her trouble very much to heart, and I suppose her mental disturbance and suffering should be called to account for the trouble which followed. It was one of those cases which I presume might be called puerperal fever. I could certainly not distinguish peritonitis or metritis; there were no local lesions; she had twins, but it was an easy delivery, yet the patient sank and died. There was no unusual lesion, and no hemorrhage; I think it was a moral effect. She was very greatly disturbed before confinement—three or four weeks before. She doubted whether she would ever get up, and didn't want to.

Dr. Ford.—I am strongly inclined to agree with Dr. Schenck that there is a form of puerperal fever which is quite different from pyemia and septicemia. We know that formerly puerperal fever was not always differentiated, but since the late developments in pathology we are able to recognize septicemia arising from matter retained in the vagina or uterus and absorbed as such, and the production of symptoms so long as the absorption continues. The absorption may take place through the veins, sometimes through the lymphatics; probably in the great majority of cases from the lacerated surfaces directly, and the general symptoms continue as long as the absorption continues, and yield when the absorption is diminished. In other cases we have pyemic fevers whose true form is easily recognized; there are chills and then enormous elevation of temperature; there are periods when the patient seems to be nearly well, or getting better, and then periods follow in which she is worse. There are a vast variety of symptoms, and a great variety of pathological conditions, which may be found in the lungs, kidneys, and even the peritoneum itself, which may contain serous fluid or pus; and there may be various abscesses; none of these symptoms are necessarily factors of so-called puerperal fever. They are the results of fever, just as inflammation necessarily follows fever, and all these inflammatory processes succeed it. During pregnancy the female organs are surcharged with nutritious matter, and the system is excitable to a degree which closely borders upon a fever, but there is a tendency toward a paucity of blood corpuscles and a poor condition of the blood in consequence. Then immediately after delivery we have a certain amount of inflammation and absorption of the excess of fluid, which is readily changeable and soon becomes putrid unless gotten rid of. I believe that the absorption of this fluid may produce certain fevers; I will not say that puerperal fever is due to the absorption of the fluids, but I do think the system is in such a state as to be unable to cope with fevers and inflammations, and that the fever easily invades the entire organism. It apers to me that the so-called puerperal fever is entirely septe from anything due to absorption as in septicemia, or abption of the veins.

SOUTHEAST MISSOURI MEDICAL ASSOCIATION.

The Southeast Missouri Medical Association held its annual meeting in Charleston, Mo., on the 6th and 7th of November. Mr. Geo. S. Elliott, in behalf of the citizens of Charleston, delivered an address of welcome. Dr. L. T. Hall responded on the part of the association. The President, Dr. J. L. Haw, delivered an able address, in which, among other topics, he reviewed State and National Boards of Health. The following papers were read and discussed: "Medical Consultations," Dr. G. W. Farrar, Ironton; "Can Alcoholism be Excused on the Grounds of Heredity," Dr. J. L. Haw, Farmington; "Typhomalarial Fever," Dr. J. M. Rowe, Charleston; "Too Much Dosing," Dr. W. F. Grinstead, Charleston; "Dental Surgery," Dr. Orr, Charleston; "Bright's Disease," Dr. L. T. Hall, Potosi. Dr. Hall had a number of specimens of urine with him, which he exhibited under the microscope, showing the various pathological changes and appearances in acute and chronic Bright's disease. Dr. J. M. Pugh, Counsellor for Mississippi county, read a report of prevailing diseases during the past six months. Drs. Cheeney and Chapman were admitted to membership, and Dr. C. A. Mann was made an honorary member. The association adjourned to meet in Fredericktown, Mo., on the first Tuesday in May, at 3 o'clock, P. M.

SOCIETY OF PHYSICIANS AND SURGEONS OF MINNEAPOLIS, MINN.

The regular monthly meeting of the Society of Physicians and Surgeons was held at May's parlors, Wednesday, November 7th, 1883, the President, Dr. C. H. Hunter, and the Secretary, Dr. C. W. Drew, occupying their respective chairs.

Applications for membership were received from Drs. A. J. Murdock and J. O. Brown, and were referred to the Board of Censors. The paper of the evening was presented by Dr. F. Allport, upon the subject of "Eye Diseases in General Practice."

In opening the subject the author stated that it was not the object of the paper to present any new facts, or to discuss any

new or obscure diseases, but simply to call to the attention of the society a few of the more common diseases of the eye which come to the hands of the general practitioner. The first disease which was taken up was conjunctivitis, signifying any inflammation of the conjunctiva, and varying in intensity from a simple hyperemia to a chronic granular conjunctivitis. The various causes leading to conjunctival inflammation were referred to, and the routine practice of some practitioners of treating all the varieties indiscriminately with solution of sulphate of zinc was strongly deprecated. In the simple hyperemic variety, rest, cold water, or a solution of borax, ten grains to the ounce of water, was recommended. Catarrhal conjunctivitis was discussed as comprising three stages, according to the character of the discharge. In the first stage, while the discharge is principally mucus, the same treatment as advised for conjunctival hyperemia was recommended. Later, when the inflammation attains a higher grade and the discharge assumes a muco-purulent character, more vigorous measures become necessary, and solutions of sulphate of zinc or copper, two grains, or tannin, five grains to the ounce of water, are admissible. When the discharge becomes distinctly purulent, greater care must be exercised, and quietude, perfect cleanliness and the use of nitrate of silver insisted upon.

Chronic granular conjunctivitis was presented as the sequel of an unrelieved acute inflammation, and defined to consist pathologically in neoplastic formations within the conjunctiva. These neoplasms are objective points in treatment, and their absorption should be promoted by the persistent use of a crystal of sulphate of copper. Iodoform applied to the affected surface immediately after a gentle scarification often succeeds well, and the cure is usually expedited by having the patient employ about once a day an ointment of yellow oxide of mercury, one or two grains to the drachm of vaseline. The use of caustics was characterized as unsafe and unwise on account of the formation of cicatrices, which might in some cases cause pannus, ulcerative corneitis, or even the loss of the eyeball itself.

Blepharitis ciliaris was briefly spoken of, and both local and general measures advised for its relief, together with the correction of any error in refraction should it exist. In the treat-

ment of ophthalmia neonatorum in its milder forms, a due attention to cleanliness and the employment of a solution of borax as lotion is generally sufficient, while in severer cases the application of solution of nitrate of silver, five to ten grains to the ounce, will be necessary—the excess being at once neutralized by solution of common salt. If the lids become much swollen it may be necessary to divide the outer commissure, and in all cases the condition of the cornea should be closely watched, and if extensive ulceration take place paracentesis should be performed at once.

Acute corneal inflammation was stated to be best treated by rest in bed in a darkened room, upon a light and unstimulating diet; dilation of the pupil being maintained by atropia, and warm water or infusions of hops or poppies being applied to the lids. If deep suppuration occur and perforation becomes imminent, paracentesis must be resorted to.

In chronic corneal inflammation stimulants and absorbents are usually required, and of these the yellow oxide of mercury, calomel and iodoform are the best.

Iritis was discussed at some length, and the importance of its early recognition and treatment insisted upon. The points of differentiation between iritis and conjunctivitis were pointed out, and the necessity for securing and maintaining as complete a dilatation of the pupil as is possible, lest adhesions take place, dwelt upon. Solutions of atropia sulphate, varying in strength according to the case, from two to ten grains to the ounce, were recommended for this purpose. The abstraction of blood from the temporal region, the inunction of mercurial ointment or the application of warm fomentations to the lids, are often of great service. In severe cases paracentesis or iridectomy may be required.

Acute traumatic iritis demands the employment of cold applications instead of warm, and the rheumatic and syphilitic forms of the disease demand remedies adapted to the constitutional condition.

The necessity for accurately observing visual derangements was pointed out and the need for their correction by properly adjusted glasses insisted upon, particularly in children, since the impairment of vision is so apt to become greater if allowed to go unrelieved.

A discussion of the paper was participated in by Drs. J. E. Moore, E. J. Brown, A. B. Cates, C. H. Hunter, M. M. Frisselle, O. L. Chapman and others.

A case of ossification of the optic nerve, retina and choroid disclosed upon enucleation of the eyeball, was reported by Dr. Allport.

Upon motion of Dr. Cates it was resolved that the proceedings of the society be published in *Northwestern Lancet*, and upon motion of Dr. Dunsmoor, in the ST. LOUIS COURIER OF MEDICINE also.

The President in a few remarks urged the society to aim to sustain the high standard which had characterized the work of the past year, and urged each member to endeavor to always come prepared to take an active part in the discussions and to present reports of interesting cases.

The society then adjourned to the dining room, where a collation was in waiting, and afterward to meet at the usual time and place.

CHARLES W. DREW, M. D.,
Secretary.

HARVARD MEDICAL SCHOOL CENTENNIAL.

On October 17, 1883, were held the centennial anniversary exercises of the Harvard University Medical Department. The occasion was made specially interesting by the fact that the liberality of friends of the institution had contributed the funds necessary for the erection of the finest building for the purpose of medical instruction that is to be found anywhere on this continent, and the dedicatory exercises of the new building were held in connection with those commemorating the centennial.

The exercises were begun in the Massachusetts Institute of Technology, the large audience room of which was filled with an appreciative audience. President Elliot made the opening address, referring to the days, one hundred years ago, when the whole faculty of the college consisted of Drs. John Warren, Benjamin Waterhouse and Aaron Dexter, who lectured in some small rough rooms in the basement of Harvard Hall and in a

part of Holden chapel at Cambridge. He contrasted the meager facilities afforded to the students and teachers of those days, in those straitened apartments, with the elegant quarters now prepared for their occupancy, with their increased corps of instructors and demonstrators, numbering forty-seven. He referred also to the marked success which has attended the efforts of the faculty to raise the standard of medical education during the last few years, and promised further advances in the future.

The great event of the occasion was the masterly oration of Dr. Oliver Wendell Holmes, for over thirty years Professor of Anatomy in the University. It is impossible in a sketch of this sort to do justice to such an oration, or to do more than note the different topics of which he treated.

Referring to his own long connection with the institution, he said: "I, who am now addressing you, distinctly remember the Boston practitioner who walked among the dead after the battle of Bunker's Hill and pointed out the body of Joseph Warren among the heaps of slain. Look forward a little while, from that time to the period at which this medical school was founded."

With reference to the founders of the school, he says: "Dr. John Warren, a younger brother of Dr. Joseph Warren who fell at Bunker's Hill, was the first mover in the project of founding a medical school in connection with Harvard College, and was the first Professor of Anatomy and Surgery. It was no easy matter for a busy Boston practitioner to deliver a course of lectures in the University town. But Dr. Warren did not ask whether it was easy or not. Benjamin Waterhouse, honorably known for having been the introducer of vaccination into America, was the first Professor of the Theory and Practice of Medicine." Dr. Holmes said that he remembered well "his powdered hair and queue, his gold-headed cane, his magisterial air and diction, and that he carried the scar of a vaccination performed upon him by Dr. Waterhouse."

He related an anecdote of Prof. Dexter, the first Professor of Chemistry, of whom it is said that, upon the signal failure of what was intended to be a brilliant experiment in the laboratory, he remarked: "Gentlemen, the experiment has failed; but the

principle, gentlemen, the principle remains firm as the everlasting hills."

He recounted the names of the text-books that were in the hands of professors and students in those days—passing lightly over the first half century—and then gave a sketch from personal recollection of the men who filled professional chairs in the school fifty years ago, at which time he was himself a student, and then referred also to some of the great men in Paris, under whom he studied after completing his course of study here.

Next he noted the special points of interest in the progress of medicine during the century: first, the method of studying the human body by its constituent elements; next, the discoveries of Sir Charles Bell and Magendie of the distinct motor and sensitive functions of certain nerves and nerve roots. The most important practical achievement of the century he conceives to be the introduction of vaccination, by Jenner, and the next the invention of auscultation, by Laennec.

In the latter half century, he noted the extended knowledge of reflex function of the nerves, the cell-doctrine, surgical anesthesia, the medical thermometer, and observed that lithotrity and ovariotomy were shared by the two periods.

He noted the differences between the modern chemistry and physiology and those sciences as taught one hundred years ago.

He recalled some of the triumphs of surgery that have characterized the century, and some of the notable changes in medical practice. He dwelt at some length upon the importance of skilled nursing, paid a passing tribute to the value of the work done and doing by Dr. Billings in the Library of the Surgeon-General's Office in Washington.

Then he referred to the new building that had been erected for the college, and in calling attention to the provisions made for the different departments, he took occasion to speak some true words of commendation of the spirit which he had almost uniformly seen manifested by medical students when occupied in the dissecting room.

His address closed with an allusion to the situation of the building "among the structures which are the pride of our New

England Venice," the churches, art halls, museums and libraries.

Following Dr. Holmes' address there was a presentation to the medical faculty of a fine portrait of the doctor, to be placed in the college as a memorial of his many years of service. The presentation speech was brief and appropriate, and was made on behalf of the alumni by Dr. Francis Minot.

Next, a bust of Prof. H. J. Bigelow was presented by Dr. Samuel A. Green in behalf of the donors, about fifty in number, including nearly all the surgeons of the two great hospitals of the city. The bust is to be placed in the surgical lecture room of the new building. Launt Thompson, of New York, is the sculptor. This concluded the exercises in this hall. The company then adjourned to the Medical College building, where the dedicatory services were held. After a prayer, President Elliot said: "On behalf of the president and fellows of Harvard University and of the Medical School, I now declare this building to be henceforth devoted to the advancement of medical science, and to the improvement of the art of healing."

An address on behalf of the donors of the building was then made by Mr. Henry Lee, and a response in the name of the medical faculty was offered by Dr. Henry W. Williams. This concluded the formal exercises; an elegant collation was served, and the building was thrown open for inspection. A reception was given at Young's Hotel, in the evening, by the medical faculty.

THE AMERICAN ACADEMY OF MEDICINE.

The eighth annual session of the American Academy of Medicine was held in New York, October 9th and 10th, at the hall of the New York Academy of Medicine. Dr. Trail Green, of Easton, Pa., read a paper on "The Insufficiency of Technical Training as a Means of Mental Culture." He advocated the pursuit of a thorough college course as a preliminary to professional education. Dr. Benjamin Lee, of Philadelphia, read a paper urging the importance and value of botanical study. Papers considering the best means for

elevating the standard of the profession, and keeping out the ignorant and unworthy, were read by Drs. Charles McIntyre, Jr., and A. L. Gihon; and Dr. A. D. Rockwell read a eulogy upon his quondam associate, the late Dr. George M. Beard. These were all in the afternoon of the first day, while the evening was devoted to the annual address, which was delivered by the president, Dr. H. O. Marcy, of Boston, who took as his topic "The Recent Advances of Sanitary Science: The Relations of Micro-organisms to Disease." The question of the disposal of the sewage of great cities occupied a considerable part of the paper.

Dr. L. S. Pilcher opened the session of the second day with a paper entitled "The Relations of Medical Journalism to Higher Medical Education in America." Some remarks by Dr. Pilcher, before reading his paper, lead to quite an animated discussion of the propositions which form the basis of the Academy; some of those speaking took strong grounds in opposition to the principle of demanding a collegiate education as a preliminary to professional study.

"Milk Supply in Large Cities" was the subject of a paper by Dr. J. C. Morris, of Philadelphia. He believes that the use of small sealed jars, marked with the name and address of the milkman, is the best method to prevent the dilution and adulteration of milk. The first thing to do, and one of the most important, is to convince the people that the cheapest milk is not the best milk.

Dr. Rockwell read a paper upon "The Value of Electrolysis," Dr. Sutton, of Pittsburg, read a paper showing "The Necessity of Cleanliness in Surgical Operations," and Dr. Kaiser read, for Dr. Bush, a paper advocating compulsory vaccination. A report on "The Progress made by the States of the Union in Medical Legislation" was presented by Drs. Dunglison and Marcy. The officers for the ensuing year are Dr. Benjamin Lee, of Philadelphia, President; Drs. A. L. Gihon, U. S. N., Nathan Allen, Geo. F. Schrady, and E. J. Birmingham, of New York, Vice-presidents; Dr. R. J. Dunglison, of Philadelphia, Secretary and Treasurer; Dr. Charles McIntyre, Jr., of Easton, Pa., Assistant Secretary.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

London Medical Schools.—Opening Lectures.—Conduct of Students, etc.—Conversaziones.—Prof. Huxley's Address.—Mr. Lister.

London, October 14, 1883.

All, or nearly all, of the London schools opened on the first of October, and with a greater number of students than ever before. I have tried to find out how many medical students there are in London, but have thus far failed. There seems to be a policy with the Deans and secretaries to keep this matter a secret, why I cannot tell. Saint Bartholomew has the largest number—probably 600—and is without doubt the best school, taking everything into consideration. Saint Thomas's and Guy's have each about 400 students.

As a general thing the term was opened by a lecture, not necessarily from a member of the faculty, but as a rule from some one outside the regular teaching corps. I was at the opening lecture at St. Thomas's Hospital by Mr. F. Le Gross Clark, F. R. S., who was at one time connected with the Hospital. There was really nothing very original about the lecture, being all couched under the idea of "good advice to students." I could not but notice the conduct of the students. To say it was disgraceful would not half express it. It was either cheering or hissing, or yelling, or stamping all the time, and quite often a combination of the whole. They called themselves "gentlemen," I suppose, but "rowdies" would be much nearer to the true character. Guy's opened in the evening with a *conversazione*, because—as I afterwards found out—the attendance at the opening lectures had become so outrageously noisy and disgraceful that at the last one the lecturer and those on the platform with him were absolutely driven out of the hall. The *conversazione* is more popular, certainly, for there were 3,000 people there, really too many to be pleasant. The beds

were removed from one of the large wards, which was decorated for the occasion. Every person on entering had a card presented him (or her), as well as the programme, on which he or she could have recorded the state of the blood, the pulse, color blindness tested, etc. It was a very fashionable gathering, but that is all that can be said of it. The London Hospital combined the *conversazione* and a lecture by Prof. Huxley for the opening at that school on the 8th. Prof. Huxley's theme was, "State Intervention in Medicine." He ridiculed the idea of the state protecting persons from quacks. No matter what laws were made there would always be people who would be ready to be humbugged, and there would be quacks ready to accommodate them. He spoke of the fact that in his student days there existed twenty-one licensing bodies, including the Archbishop of Canterbury, who all granted diplomas without any central control over the means employed by them. The system that then existed was one degrading to the profession; and the Medical Act of 1858, by establishing the Medical Register and the General Council,—a body which, although not possessing absolute control over the licensing bodies, had exerted a moral influence over them—effected certainly a great improvement. Another reform he wanted, and that was that no one should be considered qualified until they had diplomas, not of surgery alone, or medicine alone, or midwifery alone, but that a thorough understanding of all should be a *sine qua non* for *any* practitioner, whether he claimed to be a surgeon, physician, or obstetrician.

Mr. Lister has just returned from his holiday trip abroad, where he received great ovations; especially at Pesth. The professors there gave a banquet in his honor, and the students arranged a torchlight ovation to the great surgeon. At the banquet all the professors of the Pesth University were present, and many flattering speeches were made in praise of the author of antiseptic surgery. In replying to the toast of his health Mr. Lister expressed his surprise and gratification at finding so flourishing a University in Pesth. After the dinner the students, several hundred strong, appeared before the hotel, when Mr. and Mrs. Lister appeared on the balcony. Cheers upon cheers greeted them again, we are told, and speeches were made in Hungarian, German, and English. Mr.

Lister having come back to London, I went to see him operate at the hospital at his first appearance after his holidays. I expected to see the operating amphitheatre half filled, but instead there were only five present, aside from the assistants. I could not help thinking of the motto, "a prophet is not without honor save in his own country." G. H. S.

LETTER FROM PRAGUE.

Puerperal Tetanus.

Lying-in Hospital in Prague, Aug. 23, 1883.

Editor Courier:—If I have made this case too long in details my excuse must be its great rarity, this being the first case that has occurred in this hospital, which was completed in 1865, and in the old "Prager Gebaranstalt," in its last 20 years of life, but two cases occurred. Through the kindness of Dr. V. Rubeska, the house physician, I have been able to make this report complete; the post-mortem being made by Dr. Beck, of the University Pathological Institute.

Marie Pretova, 30 years of age, pregnant with third child; her two former pregnancies were normal. Menstruated first at 15 years, regular, scanty. She last menstruated Nov. 25, 1882. Is of medium height, well built and well nourished; brunette. Breasts small, hanging, with well formed nipples. Abdomen moderately distended. Uterine tumor ovoid, in median line—hydramnios. Fetal heart to the left below umbilicus, weak. Diameter of pelvis normal.

Her "pains" began the day previous to admittance, at 10 A.M. Urine contains albumen, no casts. Temp., 38° C. (100.4° F.); pulse, 100; large amount of liq. amnii; head over brim movable; breech in fundus; no heart sounds audible; position, O. L. A.

Aug. 23.—5.30 P. M. Os size of a dollar, edges thick, rounded; head, to be touched close behind symphysis, quite movable; liquid between chorion and amnion, so that the outer membrane is slack, while the other is tense; membranes quite tense during "pains," but os remains soft and don't dilate, head still disengaged. The membranes were ruptured artificially and 14 c.c.

(about three teaspoonfuls) liq. amnii mixed with meconium evacuated. 6.45 P. M., os fully dilated; head quickly entered brim in right oblique diameter; fetal heart sound, good; labor progressed rapidly, and when the head was in antero-posterior diameter of outlet forceps were applied, for no particular reason, and the head quickly and easily extracted at 7 P. M. The woman was covered up in bed, and at 7.45 P. M. the placenta was delivered spontaneously into the bed-pan. The child, a boy, was 51 cm. long, weighed 3668 grams. (8 lbs. 1 oz).

Aug. 24, A. M. Temp., 37.5° C. (99.5° F.); pulse, 84; urine, 375 c.c. (9½ oz.); no albumen.

Aug. 25, A. M. Temp., 37° C. (98.6° F.); pulse, 72; breast small.

Aug. 26, A. M. Temp., 37.1° C. (98.7° F.); pulse, 64; lochia bloody; urine, 820 c.c. (20.5 oz.), sp. gr. 1018; no albumen.

Aug. 27, A. M. Temp., 37° C. (98.6° F.); pulse, 72; lochia, dirty brown and offensive; gave two vaginal injections chlorinated soda internally, 40 c.c. (8 teaspoonfuls) ergot solution.

Aug. 28, A. M. Temp., 37° C. (98.6° F.); pulse, 84; lochia still bloody and dirty.

Aug. 29, A. M. Temp., 37.6° C. (99.6° F.); pulse, 84.

Aug. 30, A. M. Temp., 37.5° C. (99.5° F.); pulse, 72.

Aug. 31, A. M. Temp., 37° C. (98.6° F.); pulse, 80.

Aug. 31, P. M. Temp., 37.2° C. (98.9° F.) pulse, 66; a slight pain in region of right lower jaw, but can swallow without giving pain.

Sept. 1, A. M. Temp., 37° C. (98.6° F.); pulse, 72; was permitted to get up.

8 A. M. Felt stiffness and pain in back of neck, could not open her mouth as well as before, although ate breakfast as usual.

10 A. M. Had coffee and bread for lunch; drank the coffee, but could not eat the bread.

11 A. M. Was unable to eat dinner on account of contraction of oral muscles; had considerable pain and tenderness in the neck; also pain on attempting to open her mouth. Had been sitting on a bench; attempted to stand, and found she could not straighten up, the muscles of her back being stiff; put to bed; could only drink soup and milk.

1.30 P. M. Was given .02 gm. ($\frac{3}{10}$ grs.) morphiæ sulph. sub-

cutaneously, and chloral hydrat., 5 gm. (75 grs.), by the mouth.

3 P. M. Temp., 37.5° C. (99.5° F.); pulse, 84. Condition during the night: Temp., 37.2° C. (98.9° F.); pulse, 72; slept well.

Sept. 2, 6 A. M. Temp., 37.5° C. (99.5° F.); pulse, 100.

12 M. Temp., 37.5° C.

6 P. M. Temp., 37.5° C.; pulse, 100; respiration, 20.

10 P. M. Temp., 37.6° C. (99.6° F.); tonic contraction of the neck; mouth not entirely shut, could introduce a finger; all the muscles of the neck tense, especially the sterno-cleido-mastoid, and the right trapezius tender and painful; abdomen somewhat prominent, soft, sweating; lochia muco-purulent, not offensive, scanty; vaginal portion normal, slightly bent towards the right; uterus still rather large, not tender, moderately anteflexed; swallows with difficulty and pain; speaks with difficulty and can only separate the teeth 2 cm. ($\frac{3}{4}$ in.); trismus, risus sardonicus; is conscious; forehead wrinkled; abdominal muscles not attacked; is constipated. Urine passed unassisted, 200 cc. (5 oz.), dark yellow, clear, sp. gr. 1025; no albumen.

5.45 P. M. Was given .02 gm. ($\frac{1}{3}$ gr.) morphia sulph., .001 gm. ($\frac{1}{60}$ gr.) atropin, 1 gm. (15 gr.) chloral hyd. subcutaneously, and 2 grams (30 gr.) chloral hydrat. per rectum.

6.45 P. M. Was asleep. At 9.30 P.M., had slept till 9; no morphia given, but 1 gram (15 gr.) chloral subcutaneously.

Sept. 3, 8 A. M. Opisthotonos, abdominal muscles tense; those of the extremities free; temp., 38° C. (100.4 F.); pulse, 100; resp., 18.

1.30 P. M. Can separate teeth better; can swallow better (fluids); pain but no contractions in upper extremities; was given .02 grams ($\frac{3}{10}$ gr.) morph. sulp. subcutaneously, and 1 gram chloral hydrat per rectum.

4 P. M. Temp., 40° C. (104° F.); pulse, 152; passed 400 c.c. (10 oz.) of urine, sp. gr. 1032; no albumen, sugar.

5.45 P. M. Given 2 grams (30 gr.) chloral subcutaneously; condition unchanged; has thirst; cheeks and lips cyanotic.

6 P. M. Temp., 40.5° C. (104.9° F.); pulse, 144; tongue white coated; pupils contracted; sweating.

10 P. M. Temp., 40.3° C. (104.5° F.); two dejections from enema of oil and suds.

Sept. 4, 6 A. M. Temp., 39° C. (102.2° F.); pulse, 128; resp., 30.

8 A. M. Temp., 39.5° C. (103.1° F.); pulse, 144; resp., 40.

10 A. M. Temp., 39.5° C.; pulse, 144; resp., 40.

12 M. Temp., 39° C.; pulse, 132; resp., 36.

2 P. M. Temp., 39° C.; pulse, 132; resp., 44. Cyanosed, face anxious; risus sardonicus, skin moist with sweat; teeth cannot be opened more than one finger; upper extremities flexed; fingers flexed, occasionally twitching; gave subcutaneous injection of chloral, also an intra-uterine injection of very dilute carbolized water. Patient can no longer swallow; marked opisthotonos. Patient only complains of pains in the neck; lochia offensive, retained in the uterus by a strong ante-flexion.

3 P. M. Vaginal irrigation of carbolized water; urine passed by catheter 150 c.c. ($3\frac{3}{4}$ oz.) is of a clear normal yellow, acid reaction, sp. gr. 1035, contains sugar; pulse weak; subcutaneous injection morphia .03; has taken nothing since last night. The patient had nursed her child till the attack, and was then sent to the asylum; weighed 3800, was well.

5.30 P. M. Was given .03 grams ($\frac{4}{100}$ gr.) morphia subcutaneously.

6 P. M. Temp., 39.5° C. (103.1° F.).

8 P. M. Temp., 39.5° C.

8.30 P. M. Temp., 40.9° C. (105.6° F.); pulse, 152; resp., 44; a violent convulsion, marked opisthotonos; respiratory muscles also affected so that for a time respiration ceased, with great cyanosis; was chloroformed; the contractions diminished, pulse dropped to 128, respiration to 36, and cyanosis disappeared.

9.30 P. M. Chloroform narcosis omitted; gave 3 grams (45 gr.) chloral per rectum; later, morphia sulph. .02 grams ($\frac{3}{100}$ gr.) subcutaneously; patient quiet, slept deeply till towards morning, when she began groaning.

Sept. 5, 2 A. M. Temp., 40.3° C. (104.5° F.); pulse, 136.

6 A. M. Temp., 40.7° C. (105.2 F.).

8 A. M. Temp., 40.2° C. (104.3 F.); resp., 44; pulse weak, regular, slight attack of convulsions every few minutes, affecting muscles of face and neck; face dusky, anxious, risus sardonicus during contractions; urine passed during an attack; respiration, gasping; breast soft and lax; muscles of back rigid; abdomen slightly affected; legs and arms fixed, also fingers during an attack. Patient opened mouth, when asked,

about 1 inch and protruded her tongue, which was white and thickly coated; she spoke with pain; could swallow liquids only by drops; perfectly conscious.

10 A. M. Temp., 40.3° C. (104.5° F.); muscles of extremities free.

12 M. Temp., 39.5° C. (103.1° F.).

2 P. M. In collapse, conscious; muscular spasm diminished, pulseless at the wrist; the respiration gasping, frequent, with gradually increasing intervals; marked cyanosis; the skin moist; muscles of the neck still contracted; opisthotonos; respiration becoming more gasping and superficial, till at

2.05 P. M. the patient, after several absolute pauses, in which respiration ceased entirely and then commenced again, had a slight convulsion—the face wrinkled, eyes opened, pupils slightly contracted, ends of mouth drawn down by contraction of the muscles, the neck stiff, both arms flexed at the elbows.

2.07 P. M. Patient raised her right arm half-way to her mouth, the respiration ceased, arms dropped, face blanched, muscles of face and trunk relaxed—she was dead.

The temperature after death was: at

2.20 P. M., in the axillary region, 40.7° C. (105.2° F.).

2.20 P. M., in the rectum region, 40.9° C. (105.6° F.).

2.30 P. M., in the axillary region, 40.9° C.

2.30 P. M., in the rectum region, 40.9° C.

Autopsy.—Sept. 6, 11 A. M. 21 hours after death. Rigor mortis present; inner surface of calvarium in the middle meningeal sulci was injected; dura-mater, marked venous congestion; pia-mater likewise; basilar vessels quite to be distinguished with dark red blood, and removed with some difficulty.

The Brain—Cerebrum, surface moist, some edema; ependyma of lateral vessels with marked vascular injection; on section the puncta-cruenta quite marked; punctiform ecchymosis in right lateral ventricle, also in interior of right hemisphere.

Cerebellum—Vessels injected; edema.

Medulla—edematous.

Cord—Dura, external surface, vessels strongly injected, marked hyperemia, especially in dorsal region, and in the lumbar enlargement; inner surface smooth.

Pia—Anterior surface injected; cord on section shows an increase of substance from edema.

Muscles—Bright red (normal); no hemorrhage, no ecchymosis.

Heart—Relaxed; ventricles filled with clots, ecchymosis in pericardium and cardiac muscle, otherwise normal.

Both pleural cavities contained 300 c.c. (7.5 oz.) clear yellow serum mixed with blood in small quantity; subpleural ecchymosis marked both on parietal and visceral pleuræ.

Lungs—Showed marked edema with subpleural ecchymosis, dark red brown color, more especially in lower lobes and behind. On section frothy, bloody serum exuded on pressure; section floats in water, engorged with blood. Small fresh thrombi in right lower lobe; red hepatization of right and left lung.

Spleen—Small, dark red brown color, and somewhat soft.

Kidneys—Of normal size; marked injection of vessels; the capsule easily removed, and surface smooth; section shows only some marked injection of vessels on the surface.

Liver—Slightly enlarged, the surface of a dark chocolate color, smooth, of normal consistency; on section was of a grey red color; acini enlarged, with marked injection of the intra-lobular vessels.

Stomach—Punctiform; ecchymosis of all membranes; contains 100 c.c. (2½ oz.) of dirty-grey slimy liquid.

Intestines—Normal; empty, except a small amount of dark colored liquid.

Uterus—14 c.m. (5.5 in.) long, 4 c.m. (1.5 in.) broad, 1.5 c.m. (.59 in.) thick; internal surface ragged, covered with small shreds of necrotic tissue, especially at placental site on the posterior wall in upper third of cavity; the venous sinuses closed with dark red clots; general color, a dark brown red.

Ovaries—Normal; a corpus luteum in right, yellow, firm.

Vagina—Smooth and normal.

Bladder—Normal.

Breasts—Abundant escape of milk on section; glandular tissue normal; femoral vessels unchanged.

Diagnosis—Hyperemia of organs; pachymeningitis spinalis et cerebri; edema cerebri; myocarditis mucosa ventriculi; croupous pneumonia; red hepatization of lower lobes; trismus et tetanus; endo-metritis; metritis. The last being the supposed cause of the infection. Respectfully,

WILLIAM R. ENDRES, M. D.

COMMUNICATIONS.

A NASAL INHALING TUBE.

Mr. Editor:—A few months since, when in London, I was so struck with the novelty and apparent usefulness of a new inhaling tube, that I persuaded Dr. Whistler, its inventor, to furnish me with a cut and description of it, that I might lay it before the readers of the Courier. This he very kindly did, and I subjoin the following. A. J. Steele, M. D.,

"This instrument consists of a mould of the tip and alæ of the nose, the base or floor of which fits accurately over the entrance to the nostrils. Upon this floor are two perforated conical projections for insertion into the nostrils, and these communicate through a chamber below, by means of an india-rubber tube, with an inhaler. The advantages of this method of inhalation are: First, that medicated vapors may be thoroughly applied to the whole cavity of the nose and upper portion of the pharynx, as well as to the lower portion of the respiratory tract; secondly, that by this means the normal process of respiration is insured, viz., inspiration through the nose, instead of through the mouth, and consequently the act is more complete and less fatiguing to the patient; also, the enforced act of breathing *in* through the nose and *out* through the mouth is an aid in overcoming the habit of oral breathing, to which most patients suffering from nasal catarrh are addicted.

"The application of medicated vapors to the nasal tract has been carried on as a separate method of inhalation, and in a very limited manner. Sometimes this is effected by inhaling vapor through the mouth and endeavoring to blow it through the nose, the perfect accomplishment of which depends upon the skill of the individual. More often the patient breathes steam from an inhaler through one nostril, while the opposite one is closed by the finger, through an olive-shaped nozzle,

made generally of soft rubber, which is so compressible that it is apt to become blocked up. Comparatively little vapor passes into the nose by this means, and still less beyond, while

the patient in stooping over the inhaling apparatus contracts the chest, and approximates the process to that of mere smelling instead of inspiration.

"The principle intended to be carried out by means of the instrument before us is, then, to do away with this division of

nasal and oral breathing into two separate acts, and substitute normal, deep inspiration through its proper channel.

"The instrument, which has been made from Dr. Whistler's design by Maw, of London, is of vulcanite. It is light, smooth and unirritating, and is easily cleaned. The india-rubber communicating tube, which is sufficiently long to allow of proper expansion of the chest, may be adapted to various forms of inhalers."

QUININE IN SERPENT BITES.

EDITORS COURIER:—As I have never seen quinine recommended in snake bites, I take this opportunity to give my experience with it.

About two months ago I was called to see A. M., white, aged 13, who was bitten by a rattlesnake from twenty to twenty-five minutes before my arrival. I found patient in a state of great excitement, and pulse very frequent. I added ʒi. of quinine to one and a half pints of whiskey, and gave him this mixture within two hours. This case again demonstrated the immunity which a snake bite offers to the effects of whiskey, for although this boy of thirteen years had taken more than one and a half pints of whiskey, he showed no signs of intoxication. But the most noteworthy circumstance in connection with this case was the fact that ʒi. of quinine, taken within two hours, did not produce cinchonism, proving pretty conclusively that the poison of a rattlesnake is as antagonistic to the effects of quinine as it is to the effects of whiskey. There were no alarming constitutional disturbances developed. The local disturbances were of the following character: The boy was bitten at the metacarpo-phalangeal joint of the little finger by a snake having six rattles. Several minutes after the accident occurred, somebody advised him to tie a handkerchief firmly around the wrist, which he did. When I saw him the little finger was swollen and purple, and the entire hand somewhat swollen. I made a free incision into the little finger, over the bite, and applied pure carbolic acid to the wound. The next morning the entire hand and arm were very much swollen; the skin of the hand presented a discolored and mottled appearance, and the

epidermis was raised on several places. Upon incisions into these places a thick serum of a dark yellowish color escaped. The hand was washed with carbolized water, and dressed with carbolized oil. Gradually the swelling of arm and hand subsided, the epidermis of the entire hand peeled off; after that recovery took place rapidly.

In view of the above, I arrived at the conclusion that if a serpent bite offers protection against the effects of quinine, quinine in turn may offer protection against the effects of a serpent bite, as is the case with whiskey. If this conclusion be a logical one, I hope that those of my colleagues who meet with cases of serpent bites frequently will give this subject due consideration, and through further experiments ascertain whether quinine does, or does not, have any control over this poison. Should it be established that it does, that it has the same effect as whiskey in these cases, and that it can serve as a substitute, a valuable remedy is added to the therapy of serpent bites; for there can be but little doubt that more persons are killed by the enormous amount of whiskey they take, when bitten by a snake, than from the effects of the bite itself.

Respectfully, etc.,

St. Charles, Oct. 23, 1883. H. H. VUIKE, M. D.

OBITUARY.

EDWARD MONTGOMERY, M. D.[1]

The recent death of Dr. Edward Montgomery has called forth many expressions of regret and esteem from the medical societies and other organizations with which he was connected. These expressions have been printed in the daily and medical press, and we have nothing to add to the appreciative encomiums which have described, as with one voice, the high-minded simplicity of his character. It seems proper, however,

[1] This tribute to Dr. Montgomery was prepared by Dr. C. E. Briggs, chairman of the special committee appointed for this purpose on Nov. 13, by the Medico-Chirurgical Society.

to record here certain biographical details that ought not to be lost.

Dr. Montgomery was of Scotch extraction, but was born at Ballymena, near Belfast, County Antrim, Ireland, on the twentieth of December, 1816. He received his preparatory education in his native town, and afterwards pursued his collegiate studies at the Royal Academical Institution of Belfast. In 1834 and 1838 he studied medicine at the University of Edinburgh, receiving his degree in August, 1838. In 1839 he married Miss Hannah French, of French Park, near Belfast, where he practiced for a short time. In 1842 he removed to the United States and settled in Mississippi. His brother, the Rev. Alexander Montgomery, of Magharafelt, still resides in Ireland.

In January, 1849, the year of the great fire and the epidemic of cholera, he came to St. Louis and soon established an extensive practice, with the interval only of his European tour in 1873, and a few absences occasioned by failing health in his later years.

He was a president of the St. Louis Medical Society, a president of the Missouri State Medical Society and a member of the St. Louis Obstetrical and Gynecological Society. He was one of the founders of the Medico-Chirurgical Society, and was elected Professor of Materia Medica and Therapeutics in the Missouri Medical College. He was prevented by illness from assuming the duties of this professorship.

He frequently spoke, and reported cases at the society meetings, and he contributed to the medical journals papers on typhus and typhoid fever, the antiphlogistic treatment of disease, post partum inflammation and various other subjects.

He attended his patients up to October 24, when he was attacked with the brief illness which terminated fatally on the morning of October 29th, 1883.

An unusually large number of physicians, and crowds of those who had depended upon his professional skill, were present at his funeral.

His widow and children and their descendants, who cherish his memory with affection, may justly do so with pride.

RESOLUTIONS BY THE ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

WHEREAS, In the death of Dr. Edward Montgomery this society has lost one of its founders as well as one of its most esteemed and useful members, one whose entire professional life has been characterized by an exalted devotion to and arduous practice of his profession;

Coming to St. Louis in 1849, just previous to our second visitation of Asiatic cholera, in which more than 8,000 persons perished, he was soon inducted into a large practice, in which he was ever afterward sustained, by his high medical attainments, untiring industry and his kind and constant devotion to his patients; therefore,

Resolved, That in the death of Dr. Montgomery the members of this society feel that they have sustained no ordinary loss, but they and the entire profession of St. Louis have lost a friend and brother, whose noble, unselfish bearing through life constituted him an honor alike to his profession and his race, as in his life the true nobility of the man and the physician were daily illustrated, while his high professional attainments, his readiness to impart his knowledge to all, together with his kind, genial nature, endeared him alike to his professional brethren and his patients.

Resolved, That in his death not alone the profession lost one of its most esteemed and honored members, but St. Louis one of its most valuable citizens.

Resolved, That these resolutions be published in the medical journals of the city and a copy be furnished the bereaved family.

G. M. B. MAUGHS,
S. G. MOSES,
T. F. PREWITT,
Committee.

ACTION OF THE ST. LOUIS OBSTETRICAL SOCIETY.

WHEREAS, It has pleased Almighty God to remove by death our beloved and honored fellow, Dr. Edward Montgomery, who for the past thirty-five years has been a prominent and irreproachable member of the medical profession in St. Louis; therefore,

Resolved, 1st. That in recording its tribute to the memory of our departed brother, the St. Louis Obstetrical and Gynecological Society desires to do more than simply observe a formal custom, since it recognizes in the life and character of Dr. Montgomery an example worthy of emulation. With the simplicity

and guilelessness of a child, he mingled the virtues of the highest type of manhood in every phase of a most industrious, honorable and well spent life.

Resolved, 2nd. That the medical profession has lost one of its most enthusiastic and honorable workers, whose devotion to the cause of science remained firm and strong even during the fatal encroachments of disease, and whose high standard of professional ethics was indelibly stamped upon an honest and generous heart.

Resolved, 3rd. That as a member of the Obstetrical and Gynecological Society, he was ever ready to respond to every duty; and we deeply deplore the loss of his broad conservatism, wise counsel and ripe experience.

Resolved, 4th. That a copy of these resolutions be published with the proceedings of this society; be spread upon its records, and also sent, properly engrossed, to his family.

G. M. B. Maughs,
Wm. M. McPheeters,
Walter Coles,
Committee.

RESOLUTIONS OF THE ST. LOUIS MEDICAL SOCIETY.

Whereas, Through the death of Dr. Edward Montgomery the St. Louis Medical Society has incurred the loss of one of its oldest and most respected members; therefore

Resolved, That in the death of our brother and associate of many years we recognize the accomplished career of an upright man.

Resolved, That, in calling to mind his industry, his unswerving honesty, his Christian faith, our sorrow for his loss, as he was approaching the allotted three-score years and ten, is not overclouded by a sense of imperfection or failure in his life as a man and a physician.

Resolved, That his exceptional and legitimate professional success, attained by the steady pursuance of high-minded means, makes for us the memory of his life a model and an incentive.

Resolved, That a copy of these resolutions be respectfully tendered to his family.

C. E. Briggs, M. D.
G. M. B. Maughs, "
D. V. Dean, "
S. Pollak, "
G. Hurt, "
Committee.

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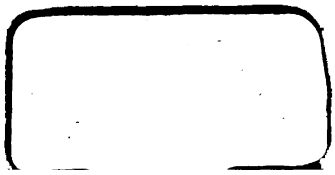
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